

◀ KARSH PHOTOGRAPHS HOLLYWOOD: in color

ALSO: ROBERT FOWLER AND THE FUTURE OF CANADIAN TV

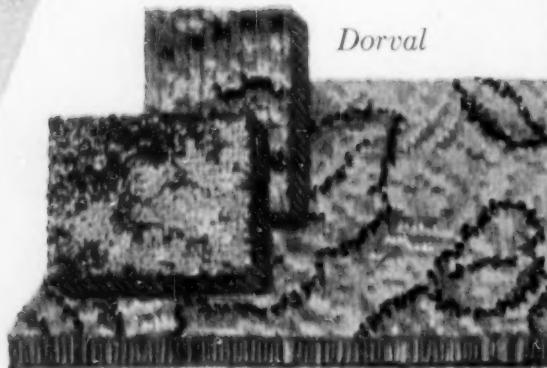
MACLEAN'S

SEPTEMBER 15 1956 CANADA'S NATIONAL MAGAZINE 15 CENTS

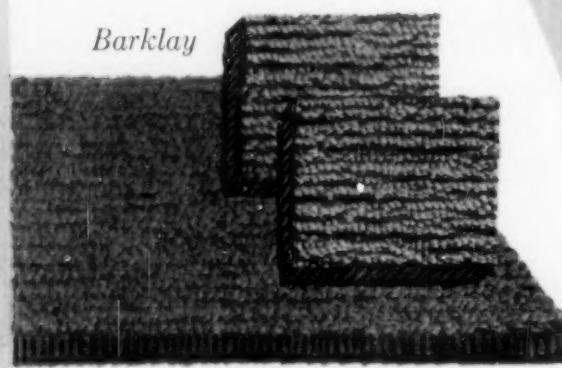


Texture is the fashion . . .

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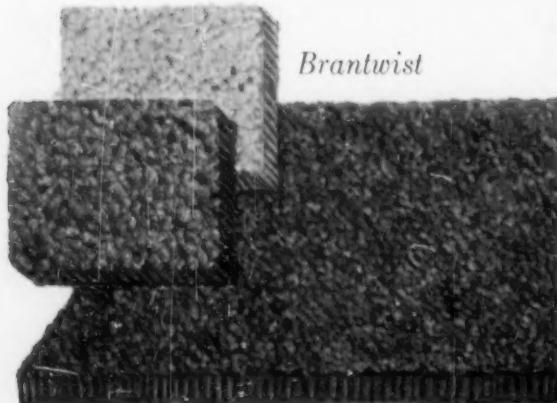


Barklay

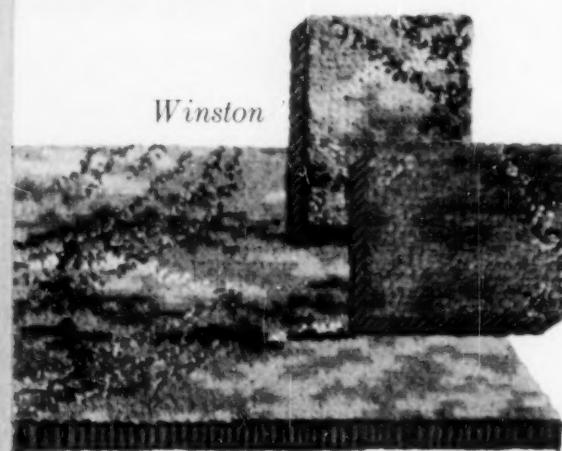


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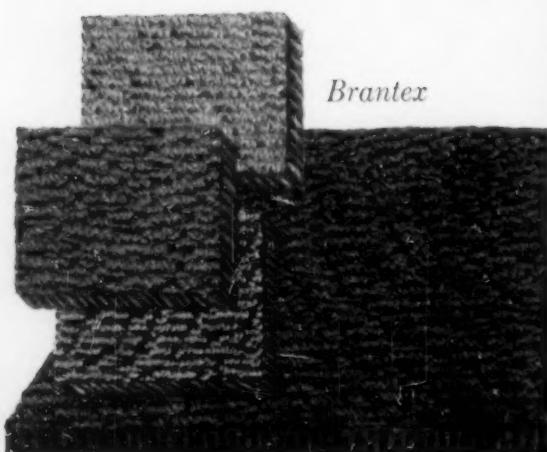


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MACLEAN'S

CANADA'S NATIONAL MAGAZINE

SEPTEMBER 15, 1956

VOLUME 69

NUMBER 19

Editorial

You can't tell a political party without a program

Many non-socialists have been rejoicing at the CCF's declaration, during its Winnipeg convention, that private enterprise ought not only to be tolerated but encouraged and that state ownership—to quote Premier Tommy Douglas of Saskatchewan—"is not the only means of enriching the lives of the people."

To any vintage CCFer this is bitter heresy; to any vintage opponent of the CCF it is the fall of Satan.

Our own view is that the truth does not lie at either of these extremes, nor does it lie anywhere between them. To us, the important and dismaying fact is that still another of the now nearly invisible minorities in federal politics has chosen to submerge much of its identity in the great majority. And in so doing it has given up much of its reason for being, in the hope that since its turn at governing never came while it was different it may get its turn by being the same.

This growing sameness in the directions and professions of our national political organizations has tended to make Canadians, politically, one of the most inert peoples in the civilized world. In the average election or on the average political issue between elections, the Canadian voter has a reasonable variety of party labels to choose from. His choice of sets of principles, of clear philosophies clearly stated and clearly held to, is negligible. The Conservatives no longer dare to be conservative; they, like the CCF, have done a good and necessary job in trying to make the government respect the rights of parliament, but they have done little to devise or fight for a positive legisla-

tive program of their own. The Liberals no longer consider it worth the trouble to be liberal. The Social Crediters pay only the most perfunctory lip service to social credit; for their votes they rely on oil, timber, hospital insurance and the Old Testament. The Socialists, in announcing their retreat from socialism, have only given formal recognition to a condition that was obvious long ago; they realize that socialism just isn't popular in these times and these parts.

If we are to place a literal interpretation on the public attitudes and utterances of the main parties, their fundamental differences of belief are becoming fewer and fewer. About the only place a really furious dissenter can register a really furious vote of dissent against the existing order any more is with the Communists, and they are such a ridiculous, disloyal and seedy crew that they have placed themselves quite outside any serious discussion of domestic politics.

We ourselves feel no furious dissatisfaction with the existing order. Our point is that there is abundant danger in our plethora of satisfaction. If we are to remain a healthy nation, alert to our own shortcomings, if we are to recover some of the toughness of mind we seem to be losing with our new prosperity, we shall need strong rallying points for critical minorities. In their reluctance to provide those rallying points, and to nail their colors high above them, we do not think the non-conservative Conservatives, the non-socialist Socialists or the non-social credit Social Crediters have either served the people well or improved their own prospects.

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Fun at the fair

For kids a country fair is all ice cream, pop and Ferris wheels. Artist **Duncan Macpherson** is prepared to let them have it — the Ferris wheel, that is. He rode this one at Ontario's Sutton Fair "till my stomach yelled . . . No aviator," he says weakly.

BANFF TEA HOUSE SURVIVES ROARING AVALANCHE

Fir Plywood-reinforced Roof helps save Chairlift Terminal Building

Designing the 3,240 feet chairlift that carries skiers and sightseers up Banff's famed Mount Norquay confronted engineer Ray Wardell with unique problems. Location of the upper terminal, which houses lift mechanism and a tearoom, was in a possible avalanche path. Snuggling the structure into the rock face of the mountain left only the roof exposed.



Under construction, tea house roof is sheathed with 4' x 8' fir plywood panels.

When the anticipated avalanche blasted over the teahouse this spring a 2,500 pound stone chimney was sheared off and the roof buried under 300 tons of compacted snow. The chimney was carried 40 feet and two 400 pound concrete caps disappeared completely. When snow was cleared, the only roof damage was a 6 inch diameter dent from the crashing chimney. Pleased with the performance of fir plywood roof sheathing, Mr. Wardell said: "With the use of fir plywood, danger of racking was eliminated and high, uneven pressure was transmitted more evenly to the supporting structure."

Comprehensive, authoritative technical information is available to architects, engineers and contractors by writing to **Plywood Manufacturers Association of British Columbia, 550 Burrard St., Vancouver 1, B.C.**



6,840 feet up Mount Norquay starts some of the best skiing in North America. Here, too, avalanches threaten at certain times of the year. Machinery for a chairlift had to be anchored and sheltered at this level, together with refreshment facilities. Many called it "foolishness" to hope any structure could defy an avalanche in the Rockies.



Chairlift deposits passengers in front of tea room terminal. Avalanche started at top of mountain visible above roof line, blasted through "V" of rocks.



After the avalanche, an 8 foot layer of hard-packed snow was shoveled off the roof. One chimney was gone, another displaced, but the fir plywood roof was intact and quite sound.



Roof Sheathing to withstand an avalanche is not every builder's problem. Fir plywood strength and rigidity are important, however, to any structure. The suburban home shown here will never have any trouble with heavy snow loads or racking.



Floor Underlayment of fir plywood gives smooth, ridge-free surface which makes an ideal base for all flexible floorings.



Wall Sheathing with fir plywood panels speeds erection. Panels meet on studs with minimum of sawing.

"Stomach" Ulcer

MANY thousands of people in our country today have ulcers of the digestive system in an active form.

This includes both ulcers of the stomach and ulcers of the duodenum—that part of the small intestine into which the stomach empties.



There is evidence that this disease is increasing, especially among those from 30 to 50 years of age.

Medical science can now offer greater hope than ever before to those who have this condition. Many cases can be cured completely, and others can be controlled.

This has been made possible largely by increased knowledge of the nature of the disease—particularly of the part that the emotions play in causing ulcers. There has also been great improvement in methods of diagnosis and treatment.

An ulcer is essentially an irritated or inflamed area in the lining of the stomach or duodenum. Although the exact cause is unknown, there are several factors which may be responsible for its onset.

Constant abuse of the stomach through eating hurried, irregular meals—or eating food that is too highly seasoned, or too hot or too cold—may lead to an ulcer.

Prolonged emotional tension, accompanied by excessive secretion of the acid digestive juices formed by the stomach, is also believed to be an important factor in the development of this ailment.

As the ulcer develops, pain, an unnatural feeling of hunger, so-called "heartburn" and "indigestion," or other digestive complaints usually occur.

Through improved X-ray techniques and other diagnostic aids, the doctor can almost always determine the size and location of an ulcer. If the condition is detected, he will recommend prompt treatment, as an ulcer may quickly undermine general health by interfering with the body's nutritive processes.

Fortunately, in many cases, ulcers can be treated successfully by appropriate dietary measures. Specialists say that the patient must also readjust his daily life so as to reduce mental and emotional strain.

In addition, new drugs are proving helpful. Cases that do not respond to either drug or diet therapy are often benefited by surgery.



As a safeguard against ulcers and other diseases of the digestive system, doctors urge everyone to seek immediate medical attention whenever persistent discomfort occurs in the region of the stomach.

With prompt medical care, many persons with ulcers and other digestive disorders recover completely and lead normal, healthy lives.

Since emotional factors are often so important in stomach ulcers and other diseases, Metropolitan has published a new booklet called *Emotions and Physical Health*. If you would like a free copy, just clip and mail the coupon below.



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FOR THE SAKE OF Argument

DR. SIDNEY SMITH ASKS

Does more money than brains go to college?

THE QUESTION "Who should go to college?" is being asked more often now than it was in the past, but its importance is not generally grasped, nor, indeed, the necessity for asking it at all. "Obviously," says the realistic man, "anyone should go to college, and does go to college, who has the desire to take a college course, the brains to pass the entrance examinations, and the money to pay the fees and expenses. Why theorize about it when theories will make no difference?"

At the present time our college students, in the main, are those who fulfill the psychological, intellectual and financial criteria just mentioned—those who have the urge, the brains and the cash. We have come a long way from the time when social barriers restricted a university education to the aristocratic and professional classes, or when prejudice debarred half the human race because they were considered the weaker sex. Some think that we have not come far enough: that a university education is the birthright of every boy and girl in a democratic society. But that view confuses equality of opportunity (which is the democratic ideal) with equality of talent (which is nonsense).

You can't bury ideas

The fact that all men are born equal under the law does not make them equal under the skull. We endorse free compulsory education for all up to a certain age in order that the divergent talents of all our children may be developed; but it would be ridiculous to expect them all to possess the talents for advanced study, for handling ideas, for conceptual thinking, that are needed in university work.

To say that individuals have divergent talents is a statement of fact, implying no contempt for those whose *métier* lies outside the academic sphere. I emphatically do not regard nongraduates as *hoi polloi* and graduates as the Lord's anointed. I do not share the touching faith of many parents in a university degree as the sole assurance of happiness, success and good citizenship. I do not believe that a parchment is the passport to pre-eminence or a sheepskin a surety of sagacity. However, I do believe that the talent for ideas should not be buried in the ground. It should be developed—not for the purpose of getting a college degree as a meal ticket, but for the enrichment of character and the service of society. In other words, those who are intel-



President of University of Toronto, Dr. Smith has been teacher and leader in Canadian universities for 35 years.

tually and morally worthy of handling college work should be able to go to college—that group, that whole group, and nothing but that group.

We are not now getting that whole group in the universities. We are not getting many of those who have the urge and the brains but not the cash. Less than fifteen percent of Canadian university students receive financial assistance; in Great Britain seventy-two percent of the university students are helped, and the average amount received by each student is much more generous than in Canada. Not long ago a survey was made in five Canadian universities of the total financial aid to students. The percentage of the students who received aid varied from twenty-nine percent of the total enrollment at one university to thirteen percent at another. The average aid received by a student varied from \$336 a year to \$120 a year. When there are meals, shelter, tuition, books and clothing to be paid for, \$336 a year does not go very far.

We need different people

Yet there has never been a time when Canada's need of educated men and women has been so great. To maintain our level of health, we need more doctors, dentists and nurses, and that means that we must seek out our young men and women who have a deep interest in humanity and readiness for service, and educate them to the standard required for the healing professions. To develop our economy we must seek out those with the aptitude for handling material things and dealing with natural forces, and educate them as scientists and engineers. We need the reflective natures fascinated by abstract questions or by the vistas of history or by the truth and beauty

continued on page 40



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M-56



London Letter

BY BEVERLEY BAXTER

How London met Marilyn Monroe

It is only fitting that in a year that included such visitors as Messrs. Bulganin and Khrushchev, King Feisal of Iraq and the Australian cricketers we should include that queen of the celluloid empire, Miss Marilyn Monroe.

Nor did Miss Monroe lack what is technically known as a buildup. Had she not chosen (and he ac-

cepted) the great Sir Laurence Olivier as her co-star and director for her production of the film version of Terence Rattigan's play *The Sleeping Prince*—a play in which Sir Laurence had co-starred with his wife Vivien Leigh in the theatre?

There was a clattering of tongues when it was made known that Miss Monroe was to play on film the part that Vivien had created on the stage. But then, even had the role been made available to her, Vivien would have had to step aside, for it was announced that, at forty-three, she was going to have a baby. Already she had a daughter of twenty-three by her first husband, a financier named Leigh Holman. Thus with this announcement did London newspapers forget all about Marilyn Monroe for a day in their enthusiasm for Vivien and the coming event. (Unfortunately, she later suffered a miscarriage.)

Yet it is not possible to remain indifferent to Marilyn for very long. Not only has she intelligence and a provocative beauty, but she cannot even raise her eyelids without it seeming like indecent exposure.

Writing merely as a contemporary observer of the passing scene, I must confess that Miss Monroe seems as normal as any young woman in any ordinary town in the great U.S.A. When she decided to marry she did not choose a casino princeling or a millionaire from Wall Street. Instead she went to the altar with Mr. Joe DiMaggio whose great days as a baseball player had ended. To marry a professional baseball player at the height of his fame would be no great catch, but to wed him when his career was ended looked like real love.

Obviously such a marriage presented dangers. No man who has experienced the adulation of the mob can fail to experience resentment, or at any rate disillusionment, when he finds that his fans have forgotten him. Much as Mr. DiMaggio may have loved his plump Marilyn, he must have been soured by the realization that the cheers which once rang in his ears were now for his Hollywood wife.

It is, however, a compliment to her ex-husband that Marilyn married again and without undue de-



As U. S. probes delved, Marilyn married playwright Arthur Miller.



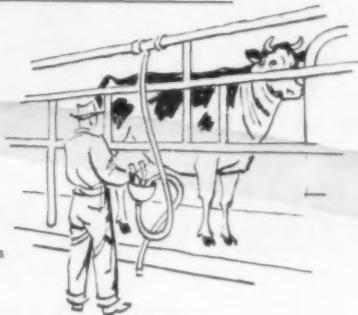
As London gossiped, Marilyn and Sir Laurence Olivier made a deal.

lay. She obviously believed that marriage is good for a girl and an institution to be preserved. And thus in the brevity of time she became Mrs. Arthur Miller. This was her third marriage, as she had a trial run in the marital stakes with a *continued on page 84*

Inco Metals at Work in Canada

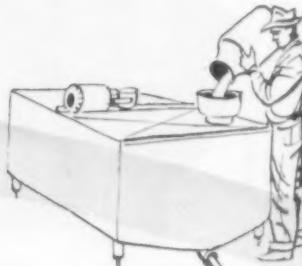
(A) MILKING MACHINE

To guard the purity of milk at milking time practically all metal parts of milking machines are made of stainless steel.



(B) MILK COOLER

Milk is quickly chilled to low temperatures in coolers made of easy-to-clean stainless steel.



(D) PROCESSING AND COOLING EQUIPMENT

At the dairy, stainless steel storage tanks, coolers, pasteurizing and processing equipment help keep milk pure.

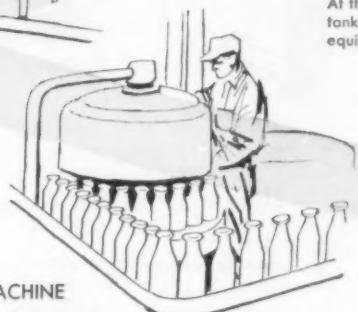


(C) DAIRY TANK TRUCK

Nickel-containing stainless steel lining of tank truck helps protect milk from contamination.

(E) BOTTLING MACHINE

Use of stainless steel metal parts in bottling machine helps keep milk sanitary at bottling time.



To make sure the milk you drink is pure, many Canadian farmers and dairymen now use milk-handling and processing equipment made from stainless steel containing about

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All the stainless steel produced in Canada for this equipment is made with Inco nickel. Here's how this Inco nickel helps provide jobs for Canadians:

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2. Inco nickel is used in Canada for the manufacture of stainless steel.
3. This stainless steel is used by Canadian manufacturers in the production of milking machines, coolers and other equipment for handling and processing milk.

These steps in the manufacture of this equipment—from the ore to the finished product—require thousands of workmen. In this way, Inco nickel stays in Canada to help provide jobs for Canadians.

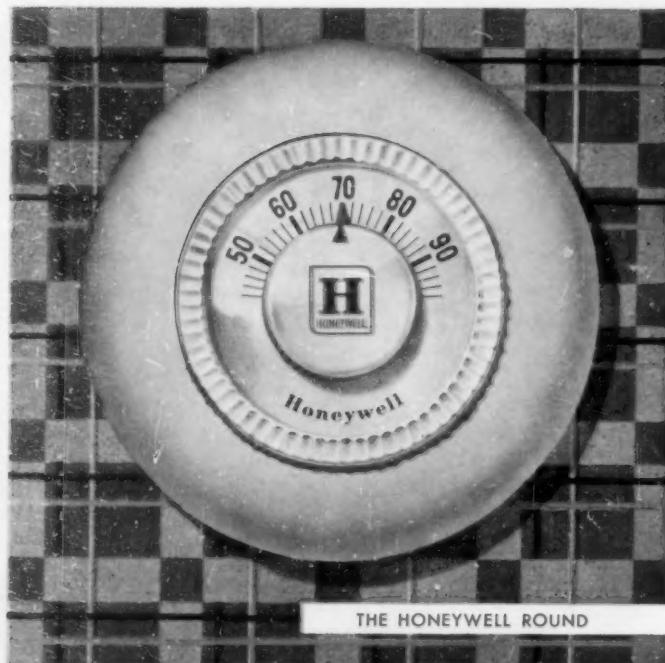


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Backstage at Ottawa WITH BLAIR FRASER



A homeless rebel, Ross Thatcher moved in with the "wasteful" Grits.

Ross Thatcher's glum conversion

It would be interesting to know whether most Liberals are proud or ashamed of one fact about their newest convert, Ross Thatcher, the MP from Moose Jaw, Sask., who was originally CCF and more recently an Independent. The fact is that Thatcher did not become a Grit out of any sudden spontaneous enthusiasm for Liberal principles, policies or personalities. On the contrary, he joined them glumly and reluctantly, after having tried out and rejected all the available alternatives.

The status of last resort, or least of four evils, may grieve those Grits (if there are any) who regard their party as a band of crusaders. The more realistic will know that many a voter has been facing for twenty years the same dilemma Ross Thatcher resolved by joining the Liberals in July. In spite of or because of this fact, Liberals have been in power throughout the entire lifetime of young men and women who will be casting their first votes at the next general election.

Thatcher's onetime allies in the CCF, with whom his relations were chronically chilly for a long time before he formally left their ranks seventeen months ago, have been saying for years that Thatcher was a fellow traveler of the Grits. By now a convert's zeal may impel Thatcher to agree with this statement, but he used to deny it with considerable heat. According to him, he was never anything but a loyal, dues-paying member of the

CCF, which he joined in a burst of radical sympathy soon after he graduated from Queen's University in the 1930s.

But as he grew older (forty next May) and richer (he is a very prosperous hardware merchant) Thatcher's radicalism cooled. Socialism appeared to him more and more "unrealistic"—one of his favorite words of disparagement. Nevertheless he remained a CCF member because, he insisted, most CCF voters in Saskatchewan had gone through exactly the same transition and were no more socialist than he. They were just ordinary folk who were fed up with the Grits and the Tories.

Not so, at any rate, the CCF members of parliament. They were still far too radical for Thatcher's taste, and he too conservative for theirs. They would squirm and fume when this heretical colleague got up to denounce government spending, call for a means test for old-age pensioners, or wonder aloud whether the farmers were making too much fuss about their economic plight. It was a relief all round when he finally left the CCF early in 1955 to become an Independent.

Thatcher never regarded this as anything but a temporary stage. He had no intention of remaining a lone wolf indefinitely, so he began to look over the other opposition parties with a view to enlisting. It didn't occur to him then to look at those Liberals of whose wasteful

continued on 93



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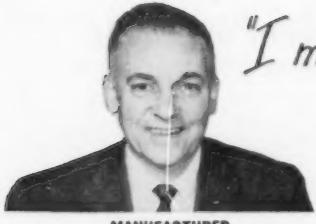
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An example of executive nattiness, lanky Robert Fowler relaxes with a cigarette to ponder testimony in Toronto.

What will Fowler say about TV?

A year ago he couldn't have cared less about television. Now, as head of the Royal Commission on Broadcasting Robert Fowler will help chart its future course. Here's a report on the man — and what he's likely to suggest

MACLEAN'S
CANADA'S NATIONAL MAGAZINE

BY DAVID MacDONALD

In the four years since cathode rays began casting their spell across Canada, watching television has become the nation's strongest social habit. Today thirty-six TV stations—eight run by the publicly owned Canadian Broadcasting Corporation—spend \$50,000,000 a year beaming the disparate likes of Hamlet and Howdy Doody at eight million Canadian viewers who, in turn, have paid more than \$750,000,000 for home screens. Most persons who gaze at TV now do so for close to nineteen hours a week. With four in the average family, that puts family television time well over seventy hours a week—against about fifty-six hours per family spent in earning a living. No Canadian industry has grown so rapidly, nor produced so many armchair experts. "Everyone," CBC chairman A. D. Dunton remarked recently, "—everyone feels strongly about television."

This fact has never been more evident than in the last five months, since a three-man Royal Commission on Broadcasting set out cross-country to determine where TV should go from here.

Before it have come farmers and grey-flanneled advertising executives, priests and psychiatrists, recognized authorities and a few recognizable crackpots. In more than a million words, thus far, they've expressed strong—and conflicting—feelings on every aspect of TV and radio, from the high cost of low comedy to that favorite topic of the debating halls, Free Enterprise vs. State Control. The classic phrases of Abraham Lincoln, D'Arcy McGee and St. Augustine have been quoted in the hassle, amid cries of "Monopoly!" "Dictatorship!" and, "Keep Canada Canadian!" As the commission's chairman, R. M. Fowler, understated it a few weeks ago: "Broadcasting is certainly a lively issue — a vital piece of Canada."

When the royal commission reports its findings to the federal government a few months from now, Robert McLaren Fowler will have a lot more to say on the subject. Just as an earlier study made Vincent Massey a joint hero and nemesis of people with strong opinions about Canadian culture, so this lanky Montreal lawyer will become the oracle on broadcasting—an armchair expert whose ideas may well influence how much television the nation will have, the kind of programs to be offered on radio and TV and

.....
CONTINUED ON NEXT PAGE



Commissioners at work. Fowler is flanked by James Stewart and Edmond Turcotte (right foreground). Witness sits at left, counsel at right.

WHAT WILL FOWLER SAY ABOUT TV? continued

the price Canadians must pay for them. If Fowler feels that we should behold fewer American acrobats and more Canadian violinists on our screens, if he thinks CBC television should be supported wholly by advertising or wholly by its viewers—whatever he suggests will be regarded by Ottawa as learned advice. His word, if the government finds it politically and otherwise acceptable, could become law.

The remarkable fact here is that less than a year ago Fowler was a striking exception to Dunton's rule—a Canadian who knew little and couldn't care less about television or radio. And this, curiously enough, is one reason why he was chosen to head the tribunal examining them.

No one spotted the incongruity faster than Fowler, a man who knows quite a bit about a lot of things. As president of the Canadian Pulp and Paper Association, he'd often been consulted by Ottawa about newsprint exports or timber reserves. In the unlikely event that the government had wished to know something of primitive painting, classical literature or hot jazz—why, he would have felt modestly competent to speak on those subjects too. But though his home on Westmount Mountain, in Montreal, contained two TV sets, four radios and five children addicted thereto, Fowler rarely looked or listened and had never known a critic's urge for reform.

Hence, when Prime Minister St. Laurent asked him to conduct an enquiry into broadcasting last winter, Fowler considered it a spectacular *non sequitur*.

"But why me?" he wondered aloud. "I don't know a thing about radio or television!"

"That," said the prime minister, "is exactly what we need—an open mind on the subject."

Besides an open mind, the role of judge demands an analytical mind, monumental patience and the knack of making good sense—qualities, as St. Laurent well knew, that Robert Fowler has displayed in many jobs. He first caught Ottawa's attention in the late 1930s when, as legal secretary to the Rowell-Sirois Commission, he helped to restyle Canadian federalism. By turns, he has since been a leading member of the bar, counsel to several governmental enquiries, general counsel and secretary of the Wartime Prices and Trade Board and chief executive of the pulp-and-paper trade association. Now, at forty-nine, Fowler regards this assignment on the commission as

"probably the greatest challenge of my life."

It is indeed a tall order, both for Fowler and for his two colleagues—James Stewart, president of the Canadian Bank of Commerce, and Edmond Turcotte, a former ambassador to Colombia. During the last twenty-four years public and private enterprises have shared Canada's air waves—as Fowler once put it—"in an atmosphere of agitation and contention, fanned by the endless enquiries of royal commissions and parliamentary committees." Thus, in being asked now to draft long-range policies for television and radio, these latest investigators have been tossed one of the nation's hottest potatoes.

Do they aim to destroy the CBC?

Moreover, they've been burned by it. The Fowler Commission was no sooner named, last December, when proponents of public and private-ownership broadcasting both spotted hidden (and opposite) portents in the appointment

—of Fowler, who earns an estimated sixty thousand dollars a year as spokesman for the free-enterprising pulp-and-paper industry,

—of Stewart, a Scottish immigrant whose rise from junior clerk to bank president reads like Horatio Alger, and

—of Turcotte, who was once editor-in-chief of *Le Canada*, the Liberal Party's now-defunct Montreal daily newspaper.

To Donald MacDonald, CCF leader in Ontario, they were "an extremely unrepresentative group which . . . is already committed to support policies aimed at destroying our publicly owned broadcasting system."

But to the Canadian Broadcaster and Tele- screen, voice of private radio and TV, the reverse was apparent. "The real purpose of the Fowler Commission," it declared, "is to find ways . . . of perpetuating the usefulness of the CBC as long as possible."

As chairman of this impossibly minded tribunal, Fowler is on a special kind of spot. With hundreds of interested parties addressing advice to him, with virtually the entire nation second-guessing over his shoulder, he must sift the manifold opinions of others without appearing to have any of his own—an art Fowler deliberately eschews. Finally, although he barely knew Chan-

nel 5 from a commercial for perfume nine months ago, Fowler is now expected to bring about solutions to some of the oldest problems of the broadcasting business.

The problems stem largely from the fact that since 1932 Canada—unlike most nations—has permitted both state and private radio and television. By the Canadian Broadcasting Act of 1936, the publicly owned CBC was created to build and link its own radio stations and those of all private operators into a truly national broadcasting system. To accomplish this, it was granted powers to license the independents and to regulate their programs, advertising and use of Canadian talent.

This unique alliance between public and private ownership, uneasy in radio from the start, grew more so under the impact of television. In 1952 the federal government gave the CBC a TV monopoly of the nation's richest markets—Toronto, Montreal, Vancouver, Winnipeg, Ottawa and Halifax—and then told it to go ahead and license private stations elsewhere, no more than one to a city.

By 1955 it was clear to Ottawa that no one was happy. Viewers protested that the one-channel system denied them any choice of programs. Private television demanded a crack at the CBC's captive audiences and freedom from CBC control. And the CBC—now facing a twenty-million-dollar deficit for 1956—wanted more money.

What to do? The federal government, undecided, then appointed the Fowler Commission and handed it some posers:

- Should television be thrown open to competition?
- How much money does the CBC need for TV and radio, and where should it come from?
- Should all broadcasting be supervised by the CBC, or by some independent body?
- With marked American influences all across the land, how can Canadian TV and radio retain a Canadian accent?

Seeking answers, Fowler and his two colleagues have now traveled from Halifax to Vancouver, studied more than four hundred briefs and private letters, questioned hundreds of witnesses and listened to a bewildering variety of views. They've been told that TV is sending more people to church—and to psychiatrists' cots; that competition will pro- **continued on page 86**



FOR SPONSORED RELIGION

Father Charles Lanphier, member of the National Religious Advisory Council:

"The CBC should allow commercially sponsored religious TV programs . . . dignified programs like Bishop Fulton Sheen's *Life Is Worth Living* and *The Greatest Story Ever Told* . . . but not hot-rod evangelism."



From priests to broadcasters and businessmen, everyone has some advice for Fowler



FOR PRIVATE NETWORKS

Jack Kent Cooke, president of Toronto radio station CKEY:

"The CBC should give up its networks and become a production centre for programs of national import and of particular interest to various minority groups, which could then be carried through the length and breadth of the country by private networks."



FOR MORE COMPETITION

Peter Wright, spokesman for the Association of Canadian Advertisers:

"The CBC should welcome competition in TV. It would produce better programs, better talent, better broadcasting. The CBC would learn to produce programs with wider appeal, and for less money."



KARSH VISITS HOLLYWOOD



This album of photos is strictly from dreamland. Here's the story of how Yousuf Karsh played hooky from photographing his Faces of Destiny to make the pictures on these pages

By BARBARA MOON

Photographer Yousuf Karsh admits unrepentantly that he played hooky to take the luscious portraits on the accompanying pages. He had proceeded to Hollywood this March in the sober line of duty, having arranged to take pictures of cartoonist Walt Disney, composer Igor Stravinsky and Bibliophile Cecil de Mille to include in a new volume of Faces of Destiny.

But a photographer, it turns out, gets recurrent cravings for sheer uncomplicated beauty—Karsh calls it “refreshing

nectar”—after a steady diet of distinction and significance. “Starlets do not,” Karsh mused recently, “have to be symbols. It is enough that they are superbly decorative.” He saw it would be silly to leave the film capital without seizing this supreme chance.

Marilyn Monroe and Ava Gardner were out of town, so Karsh, who doesn’t go to the movies, skimmed through some movie magazines, picking the faces he thought would be most therapeutic.

“I will not,” *continued on page 81*

PHOTO ALBUM CONTINUED ON NEXT FOUR PAGES

This earthy portrait of Anita Ekberg is one of an album of portraits of Hollywood beauties photographed by Karsh and published here for the first time. For more of Miss Ekberg and others, turn the page.





ANITA EKBERG

When she posed for Karsh make-up covered a black eye she had received in an accident at the studio. She consoled herself by munching fruit, nibbling from a smorgasbord on a nearby table and quaffing vodka, which caused Karsh some artistic concern. He says dryly: "Her bust is thirty-seven inches already."



AUDREY HEPBURN

Karsh found her "sure of herself, brittle on the surface, and gracious." Later she all but ignored Karsh as she eagerly salvaged minutes from their busy schedules for a chat with her actor-husband Mel Ferrer. So Karsh, letting no opportunity escape, photographed them together.



ANNE BAXTER

She impressed Karsh with her intelligence: while they worked she discussed Sartre, Gide and Malraux. Her three-year-old daughter impressed him with her

manners: she curtsied. While Karsh packed up his equipment after the sitting, Miss Baxter left the room, then reappeared in a negligee to say goodnight.



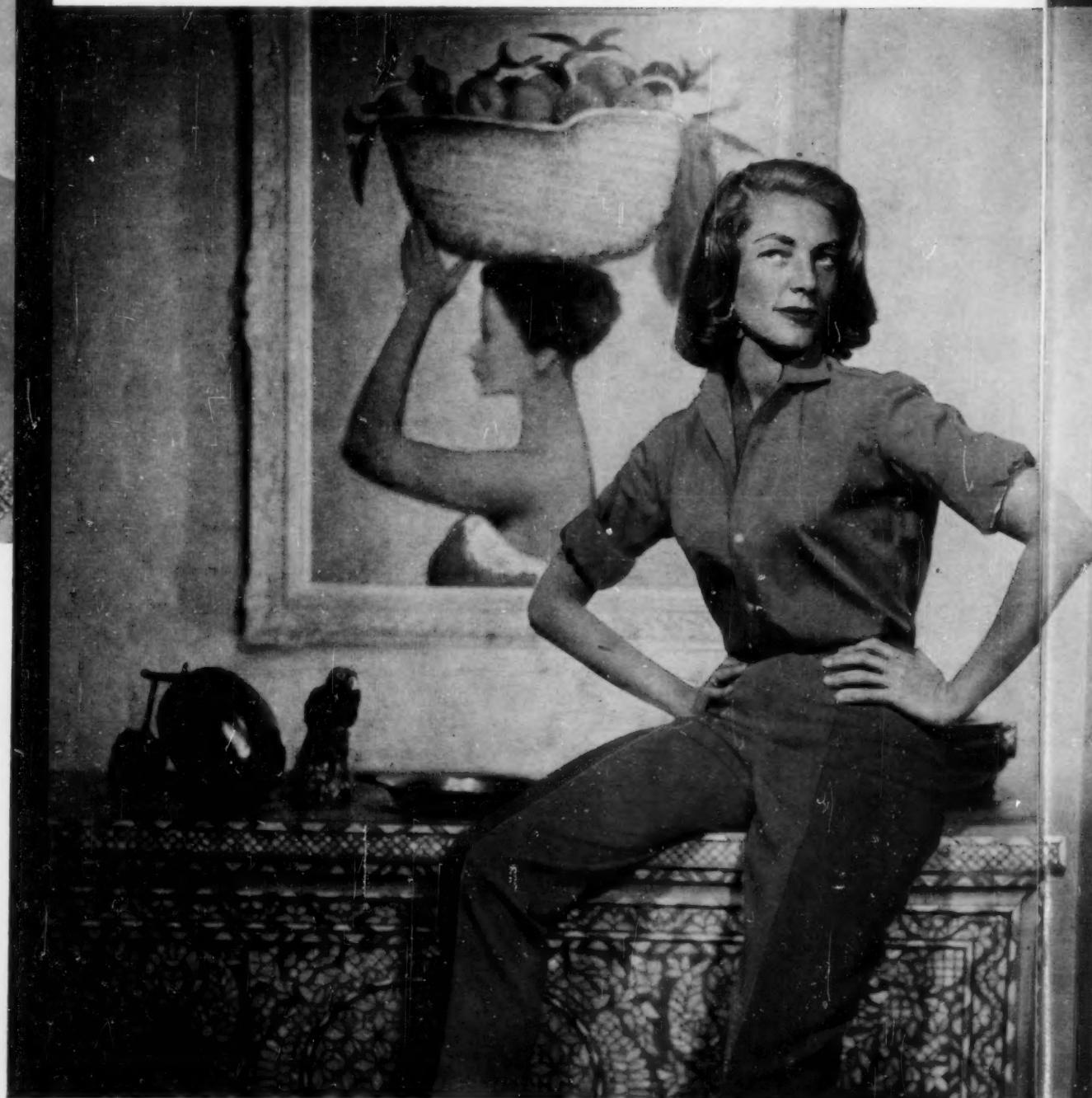
CAROL CHANNING

"You make me laugh and cry at the same time," said Karsh in tribute to the comedienne's "tremendous gift and dedication to that gift." He hit upon the idea of photographing her in an opulent setting—and immediately hit a snag. The goblet RKO had lent him wasn't ornate enough. Karsh refused to proceed. Miss Channing went off to Detroit. By the time she'd returned Karsh had his goblet—and forty-five minutes later had his picture.

JOAN COLLINS

Hazel-eyed Joan Collins, a shapely English import, borrowed an apartment to pose for Karsh—her own was too small. When a shoulder strap slipped, Karsh, pleased with the effect, had her leave it down.

Feeling tired, she sipped water. Sympathetic Karsh called off the sitting and sent her out for a drive.



LAUREN BACALL

Her face, says Karsh, has a "tigerish" quality. He first met her eight years ago; since then, he found, "she's acquired poise and sophistication." As Karsh worked, her husband, actor Humphrey Bogart, recently out of hospital, prowled the sidelines in a dressing gown.



DEBRA PAGET

The Karsh family's verdict:
Mme. Karsh: "She has a
beautiful figure." Karsh:
"Undoubtedly a very fine
figure." Mme. Karsh: "She
is charming and sweet."
For the photo Miss Paget
covered her auburn hair with
the dark wig she wears
in *The Ten Commandments*.
removed her contact lenses
because Karsh said they
had no expression.





Killer Harry Orchard after his arrest in 1906. He died two years ago in prison.

A MACLEAN'S FLASHBACK IN TWO PARTS BY STEWART H. HOLBROOK

The frightening life story of Canada's most infamous hatchet man

1: How Harry Orchard murdered twenty men

With a valise full of dynamite he roamed
the western U. S.,
a mine-union assassin in an epic labor war.
For a decade his one-man
reign of terror filled half a continent with fear

If a poll of social historians were taken to determine the most evil person ever born in Canada, Harry Orchard would almost certainly win it. He was a paid murderer who terrorized half a dozen states of the U. S. for almost a decade and killed at least nineteen people before he was put in prison for life. He may have killed more, for so careless and conscienceless was Orchard in his crimes that he murdered indiscriminately. Cheerfully and without remorse, he killed thirteen men in one blast of dynamite. Trying to poison one man, he barely missed murdering his whole family—wife, children and servants. His victims ranged from dollar-a-day miners to a wealthy mine operator, the former governor of a state and complete strangers whom he didn't intend to kill at all.

There was a touch of genius too in his evil-doing. He anticipated by almost half a century the booby traps and infernal machines of World War II. While other terrorists were throwing clumsily contrived bombs at their victims and often perishing with them, Harry Orchard was fashioning intricate and ingenious time mechanisms that allowed him to be far away from the scenes of his crimes when they happened.

Orchard was a murderer for the Western Federa-

tion of Miners, which for about twenty years ruled most of the hard-rock mines of the western U. S. and Canada and warred with mine owners who behaved with a lawlessness and violence that often matched or exceeded the union's own. The highest officers of the miners' federation selected the victims; Orchard killed them—for prices that ranged from fifty to five hundred dollars, depending on the crime or what Orchard felt he could extort from his employers.

His story is more than the story of a mass murderer. It is also the story of an era in Canada and the United States—from 1890 to 1910—as ruthless and uncontrolled as the murderer himself. It was a time of bitter labor strife as the union movement grew and fought for power and thousands of employers fought back to preserve their position as absolute dictators over the men who worked for them.

Sometimes, to meet terror with terror, the union called on Orchard to kill an enemy it greatly feared and could handle in no other way. More often it sent him out to spread terror and cow its enemies by the ruthless creation of sudden death, as a mad dog spreads terror.

In the end Harry Orchard was caught. He saved his skin by testifying against the men who had paid him to kill; but he spent the rest of his life—fifty years—in prison. Writer Stewart Holbrook talked to him there and later visited the scenes of his crimes. In this and a second article Holbrook tells the story of Harry Orchard—starting with the first time he met the man who was called The Wandering Assassin.

Boise lay sweltering in the dry heat of August. The piles of brick and stone and concrete of Idaho penitentiary stood in a brief spot of green at the base of yellow-brown hills that looked stark and grim to eyes unaccustomed to sagebrush. I had come here to call on Harry Orchard, a professional killer. His record had long been familiar to me. There was nothing of the Western Bad Man in it, no flavor of the Daltons, of Harry Tracy, of Billy the Kid. Yet from none of these had emanated such unease as Orchard brought to much of western United States.

He was a new type of killer. What interested me more than his technique, however, was the fact that this son of a Canadian farmer had more than a little to do with making the reputations of William E. Borah, Clarence Darrow and William Dudley Haywood. In addition to his influence on the careers of these men, Orchard's activities had a lasting effect on what had been the most powerful labor union in the west. Meanwhile, he outlived his era. For half a century he remained in prison, a fading legend, to die two years ago at eighty-eight. By then he was virtually forgotten. But he was the greatest hatchet man of his time.

A blistering sun beat down on the prison yard as the warden led me to a little shack next to the chicken and turkey pens inside the Big Wall. It was Sunday. The prison quiet was intense. We went into the comparable gloom of the shack and were welcomed by Harry Orchard.

I saw a stocky healthy man, actually seventy-four years old then but looking and acting and talking like one of sixty. His tanned face had a pleasant smile. His eyes were clear and blue. He was about five feet seven inches. He had broad shoulders. There was no trace of prison softness about him. The number on the back of his overalls was 1406. Since he had acquired that number, on Jan. 8, 1906, almost six thousand other men and a few women had entered the prison.

Orchard had long refused to discuss his criminal past with anyone save "close religious friends." Among these were Mrs. Frank Steunenberg Sr., widow of his last victim, and Elder Frank Steunenberg Jr., of the Seventh Day Adventist Church. The fact that I knew the Steunenbergs was made known to **continued on page 68**



His worst crime: Nonunion miners crowded this station in the Cripple Creek region of Colorado when Orchard blew it up with a giant charge of dynamite and killed thirteen men.



His bosses: George Pettibone (left with wife), Big Bill Haywood, Charles Moyer (with wife) were officials of the Western Federation of Miners, which paid Orchard for his murders.



His pursuers: Looking for the killer, state troopers rounded up hundreds of miners after Orchard had shaken Cripple Creek with dynamite. He outwitted militia and bloodhounds.

Once we thought hurricanes belonged to the tropics.

But we've had ten in three years and weather scientists suspect

that's not all. Here's a disturbing report on

Why we're getting more disastrous hurricanes

By Fred Bodsworth

Until recently Canadians paid little attention when their radios and newspapers reported a new hurricane forming in the West Indies. Hurricanes, they felt, were a tropical menace of no concern to Canada, like sharks and crocodiles. In fact, there's a story about a Nova Scotia man who bought a barometer from a mail-order firm and sent it back in disgust because it arrived predicting "hurricane." It was a fraud, he said, because hurricanes never reached this country. But the barometer was more accurate than he knew, for it was September 6, 1953, and half a day later a hurricane called Carol ripped through the Maritime provinces, doing tremendous damage.

Today that barometer would be readily believed, and when there is a hurricane report on the radio, Canadians cock an attentive ear, for in the three years since Carol lambasted the Maritimes, eastern Canada has been lashed by ten lusty hurricanes, including the notorious Hazel which killed more than eighty people around Toronto in October 1954.

Before 1953 about one out of every ten hurricanes born in the West Indies and the Caribbean came as far north as Canada before dying out; but Canadians hardly recognized them as hurricanes because, by the time they hit, most had petered out to stiff gales. Since 1953, however, about one in three hurricanes originating in the south have hit Canada, and some of these have delivered a Sunday punch.

Whether this increase is a passing phenomenon or permanent has still to be determined by scientists. Most weathermen are beginning to suspect that hurricanes, always perverse and unpredictable, are changing their ways, and that Canada and the northern U.S. will continue to see more of them in future. "U.S. meteorologists are studying this thing more than we are, because they are closer to hurricane sources and more concerned," says Keith T. McLeod, Department of Transport superintendent of weather services in Toronto. "They are turning up evidence suggesting there is much more than chance or accident involved in recent hurricane developments."

Many meteorologists think that the tendency for recent hurricanes to lunge farther north than formerly is part of a bigger picture in which they see North American weather abandoning some

of its traditional patterns. They say that northern hurricanes, milder winters and moderating climate may all be linked together and stem from the same source—a shifting of the upper altitude's globe-encircling jet stream that is causing more frequent invasions of tropical air into our traditionally Arctic-dominated Temperate Zone weather.

While weathermen ponder the cause, insurance men are ruefully studying the effects. Wind insurance is grouped with fire, water and hail in a single comprehensive type of policy. The cost has been decreasing steadily for years because losses from fire, the main hazard, have been going down. Insurance officials say there are no detailed breakdowns, but even without these it is obvious that wind losses are rising. An official of the rate-setting Underwriters Adjustment Bureau in Toronto says increasing wind losses may soon offset fire savings and start insurance costs rising again.

Hurricanes occur from June to November, but more than eighty percent of them come during the hurricane season's peak months of August, September and October. Will this year produce a repeat performance of what occurred during the past three? Meteorologists and insurance underwriters are waiting anxiously for the answer.

Hurricanes have taken us somewhat by surprise, and many Canadians are asking: What are they?

In many parts of the tropics, air masses that lie motionless for long periods over warm seas sometimes develop spontaneously into extremely severe and compact storms notorious for violent winds and rain. They must have tropical seas for their birth and meteorologists call them "tropical cyclones." But throughout the world they are known by a variety of names. In the Pacific Ocean they are called typhoons, in the Indian Ocean they're known as cyclones, Australians call them willy-willies, and the West Indies calls them hurricanes.

Hurricanes have the same general anatomy as any storm—a central zone of low air pressure with a large doughnut-like ring of wind revolving around it. The wind is simply air being sucked into the central "low," but the earth's rotation deflects it into a spin and it winds up spiraling around and around, the **continued on page 51**



ONT.



QUEBEC

6 When fickle Hazel swung inland in 1954 eighty in Toronto died.

TORONTO

5

BOSTON

4
MARTHA'S
VINEYARD

UNITED STATES



3 Sea wrecked this Carolina beach home. Hurricanes may lift the tide 15 feet.

South Carolina

3
MYRTLE
BEACH

4 At Martha's Vineyard, Mass., hurricane Carol's ugly winds drove ships ashore.

2 Florida is often hit but year by year hurricanes are moving farther inland

2
PALM BEACH



CUBA

JEREMIE



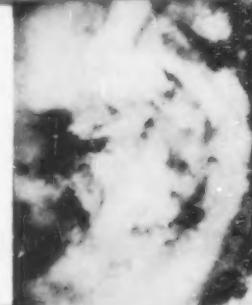
1 In fall months hurricanes may strike anytime in Caribbean. This one leveled a town in Haiti

CARIBBEAN

SEA

PACIFIC
OCEAN

ATLANTIC OCEAN



How hurricanes start and where they go

They're born in the Caribbean as sea air heated by the sun spins up. More air rushes in, starting a whirling mass, as seen in a hurricane eye (right). This is steered coastward by high-pressure air over the Atlantic. Red arrows show roughly the path of hurricane Hazel (left arrow), Carol and Edna (right) in 1954.

SOUTH AMERICA

PAR

The secret war of Charles Goodeve



CONCLUSION: The weapons of tomorrow

The Panjandrum, the Alligator, and Lily the floating airport

... these revolutionary inventions created under the guidance of a little-known Canadian have yet to be tested in combat

By Gerald Pawle

This was the problem: It was reported in that summer of 1943 that the Germans holding the coast of northern France were racing ahead with the construction of an Atlantic Wall to keep out the Allied invaders who they knew in their bones would come out of the Channel miss some fateful day. The wall was to be an enormous bastion of reinforced concrete ten feet high and seven feet thick. Before any troops landing on the beaches could reach the country beyond, this would have to be knocked down — or, at any rate, a breach would have to be made in it large enough for a tank to pass through.

The man to whom the top Allied brass took the problem was Charles Frederick Goodeve, the Manitoba-born naval officer who was now in effective control of the whole research and development program of the Royal Navy. Recently risen from the rank of lieutenant-commander RNVR to an Admiralty post with status equivalent to the rank of rear-admiral, the thirty-nine-year-old Canadian had already chalked up some brilliant achievements in the "war of the wizards." As deputy director of the Department of Miscellaneous Weapon Development—popularly known as the department of "Wheezes and Dodges"—it had been his task to milk the brains of the world's best inventors and supply the Allies with new secret weapons to which the enemy would have no counter.

The achievements of Goodeve's small band of dedicated idea men — and of the scientists in other walks of life with whom the DMWD kept in close contact—had already included revolutionary weapons to beat the U-boat and the Nazi blitz, the development of the Oerlikon anti-aircraft gun, radar deception devices and the steel-saving plastic armor. Later they produced vital components of the Mulberry harbors, helped in forwarding the "earthquake bombs" used by the famous dam-busters and perfected techniques for clearing wrecks from captured harbors. The story of these achievements has already been told in articles in the previous two issues of Maclean's. But several of the most interesting weapons devised by the Wheezers and Dodgers were never tried in war, and remain as prototypes for development in some later struggle. This final article tells the story of these weapons of the future—some of them revealed for the first time.

Charles Goodeve was the third of five children in the family of Canon Frederick W. Goodeve who, at eighty-seven, is currently a patient in the Princess Elizabeth Hospital at Winnipeg. The family moved from Neepawa to Winnipeg's Chestnut Street when Charles was in public school. His interest in science and invention be-

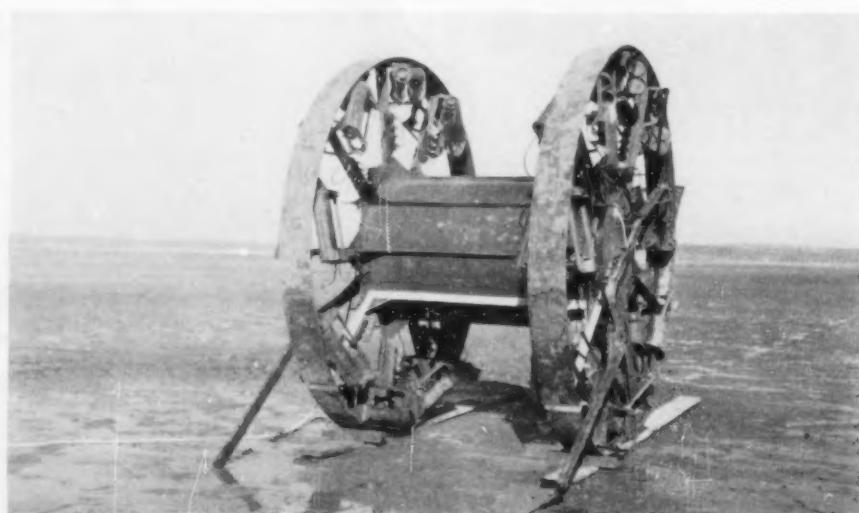
gan when he went on to the Kelvin Technical High School. His sister, Mrs. John Parton, says today: "Any of Charles' classmates interested in science always congregated upstairs in our house at 97 Chestnut. They filled the air with vile smells and small explosions. The object was to see how bad they could make the smells and how loud the explosions. Mother was so angry! She was always afraid they'd burn the house down."

Goodeve surreptitiously rigged wires across the street to a friend's house and transmitted telegraphic messages. Later, before he entered the University of Manitoba and began the career

that has brought him a knighthood and renown in scientific circles, he worked in an accountant's office where he amused himself by fitting push-button buzzers on all the executives' desks. Later still, in London where he went on a scholarship, he tinkered with a scheme to clear the fog out of the metropolitan air by means of electrolysis.

Early in 1940 he asked for and got the job of gathering a small team of experts and experimenters to sort out practical new weapon ideas. One of his outstanding personnel choices was Commander Nevil Shute Norway, who (as Nevil Shute) is the author of many successful novels including *The Pied Piper*, *The Chequer Board*, *A Town Like Alice* and *Beyond the Black Stump*. It was on Norway's desk in the DMWD office in Admiralty Arch that the Allied invasion planners' Atlantic Wall problem fell. Could the Wheezers and Dodgers dream up a workable device to smash such a bastion?

To breach a wall of such dimensions meant that one ton of high explosive must be placed in close contact with it. The beach itself would, it was assumed, be sown with landmines in front of the wall, and the *continued on page 55*



The Panjandrum's bite—two tons of TNT—lay between its ten-foot-high collapsible wheels.

The rocket-driven robot built to smash the Nazis' Atlantic Wall

Plagued by steering flaws, the fearsome robot capsizes on a Devon beach during 1944 trials.



The life and death mystery of your liver

THE DOCTORS KNOW:

You can't live without it
It's bigger than it need be
It's your hardest-working organ
It can strangle itself
And it can cure itself

THE DOCTORS DON'T KNOW:

Why it's indispensable
How much of it you really need
How many jobs it does
How it becomes diseased
How *they* can cure its ills

THIS IS WHAT THEY'RE DOING TO FIND THE ANSWERS

BY ALEXANDER BARRIE

One day in 1926 the head of Toronto University's physiology department put his nose through the office door of a young professor on his staff. "Young man," he said, "I'm told you are working on the liver. Is that correct?"

"Yes, sir."

"Then my advice is, beware. For it's a swamp from which many never return."

The younger professor was Dr. C. H. Best, who was to become one of Canada's most distinguished medical researchers, co-discoverer with Sir Frederick Banting of insulin, and now head of the world-famous Best Institute, named in his honor.

Thirty years have passed since the senior professor gave his warning. During this time, intensive studies of the human liver have been made in Canada and all other advanced countries. Yet there is still plenty of the swamp left in this, the most baffling of all the body's organs.

If your liver were removed, for instance, nothing could be done to keep you alive. Why? Medical science doesn't know; it can explain what makes any other organ indispensable, but when it comes to the liver it is still wondering. It is known that the liver is very much bigger than it need be. Why? Again, the doctors don't know; nor are they sure how much of it can be spared, but they think it may be as much as four fifths. Everyone agrees that the liver takes on many separate jobs

for the body. But how many? Some experts suggest about thirty; others guess away into the hundreds.

When it comes to liver disease, the uncertainties multiply. The doubt begins with the fact that, because liver disease is so often wrongly diagnosed, no one knows how much of it there is about. Then when disease is diagnosed, little can be done beyond diet and rest to cure it. Infectious jaundice, for example, is a common complaint. How does it spread? Through swallowing contaminated food and drink, say some doctors; but others say this is unproved. Since all attempts to give the disease to experimental animals have failed, establishing the truth is especially slow.

Cirrhosis, the worst of the purely liver diseases, attacks mankind beneath a mantle of mystery all its own. After centuries of research its causes, its cure and its effects are still debated and doubted by specialists.

It is not surprising, therefore, that after many years spent studying these puzzles, Dr. Best should have this to say about it all: "The subject is terrifying—even to the finest experts."

Many patients are quick to blame their livers for the out-of-sorts feelings that everyone has at times. People say that they are feeling "liverish"—a very casual diagnosis that in most cases is probably wrong. One doctor in Harley Street, London's medical temple of learning, has listed the symptoms complained of by most self-styled "liverish" patients: head- *continued on page 64*



He understands horses, Merrill claims, and he fondles and talks to them constantly. But they're strictly a business to him and he quickly gets rid of horses that don't win.

Frank Merrill's winning way with horses



He knows where to look for ailments that make a horse lose. Too-sharp teeth from grinding food can cut a horse's mouth. Merrill files them down himself.



He works with poultices, oils and heat machines to cure leg troubles that plague many horses. He has a reputation for making bad-legged horses win.

When they can't run a lick for his rivals he patches up their pains

and turns them into winners. Here's how a strange blend of soft heart and hard head made this Canadian the continent's top trainer

By Trent Frayne

Photos by Paul Rockett

The horses and people who populate Canadian racing have made few contributions of international significance to the ancient sport of kings (a handful) and paupers (a legion). There have been no four-legged candidates to match, say, Man o' War or Citation or Nashua, and the only two-legged Canadians to raise a rifle beyond the borders have been the late J. K. L. Ross, an owner whose horse Sir Barton won the Kentucky Derby in 1919, and jockeys like Johnny Longden and Ted Atkinson who fled to the United States almost the instant they could steer a horse around a course without falling off — if not sooner.

But suddenly, last year, a gaunt and sallow Toronto trainer named Frank H. Merrill Jr. turned up as the leading conditioner of thoroughbred horses on the continent. Racing around the calendar on five tracks in Ontario, three in Florida, and at Narragansett near Boston, Merrill saddled one hundred and fifty-four winning mounts, twenty-six more than any other horseman in the United States or Canada. Some of the horses he raced were his own, and some belonged to other owners who hired him as their trainer for eight dollars a day per horse, plus ten percent of their winning purses. Merrill-trained horses took down purses of \$298,794, although what proportion found its way back to Merrill is obscure. "A lot of the better money winners belonged to other guys," Merrill says. "Besides, I don't see that it's anybody's business how much I wound up with." What is widely known is that in many cases the horses Merrill won with had been seemingly irredeemable cripples that other trainers had given up on.

In fact, in the thirteen years since Merrill came out of a tuberculosis sanitarium vowing he'd never work indoors again, he has become so successful in resuscitating apparently hopeless cases that around the race tracks they say that "Frankie could even make the glue-pot win." He owes a good deal of his success to a notion that horses are a lot like humans; some are intelligent and well adjusted—and some are just plain nuts.

For instance, last year Merrill bought a horse called Earmarked, seven years old, with a right front knee the size of a grapefruit. The record showed Earmarked had not been in the money for nearly two years.

"He was a mental case, too," Merrill recalls. "Why, you'd go in his stall and just point a finger at that knee and he'd back in the corner and throw his head and stare at you wild-eyed. He was scared of everybody because he'd had so much trouble."

When Merrill got Earmarked to his stable in Old Woodbine's stabling area at Toronto, he spent a month winning the horse's confidence. He'd pat his nose as he walked past his stall, talk softly to him, and run his fingers gently through the horse's forelock. Then he'd go in his stall with wary confidence, talking constantly to the horse, patting his rump and calming him.

Merrill had diagnosed Earmarked's knee ailment as a heavy calcium deposit and when the



He's a celebrity to race-track regulars, who bow to his opinion on the color of jockeys' silks (above), or which horse to bet on. Once a heavy bettor, Merrill seldom makes a wager now, even on his own horses.

time came to treat it Merrill used a special hot treatment that he devised himself. It consists of hot oil, Vaseline, hot wax and other oils. He bandaged this mixture around the horse's knee, reasoning that the heat would reduce the swelling and disseminate the calcium. When the wax cooled it hardened, forming a cast that Merrill left on the knee for four days.

"It had the effect of a slow firing job," Merrill says. "Firing" is a commonplace practice around race tracks. Ordinarily, it's done by veterinarians

who block off the affected area much as a dentist blocks off a tooth, and then inject a hot needle into the bone in a sort of tattoo process. This forms scar tissue which strengthens the bone.

After a month of Merrill's psychology and four days of treatment, Earmarked was a different horse.

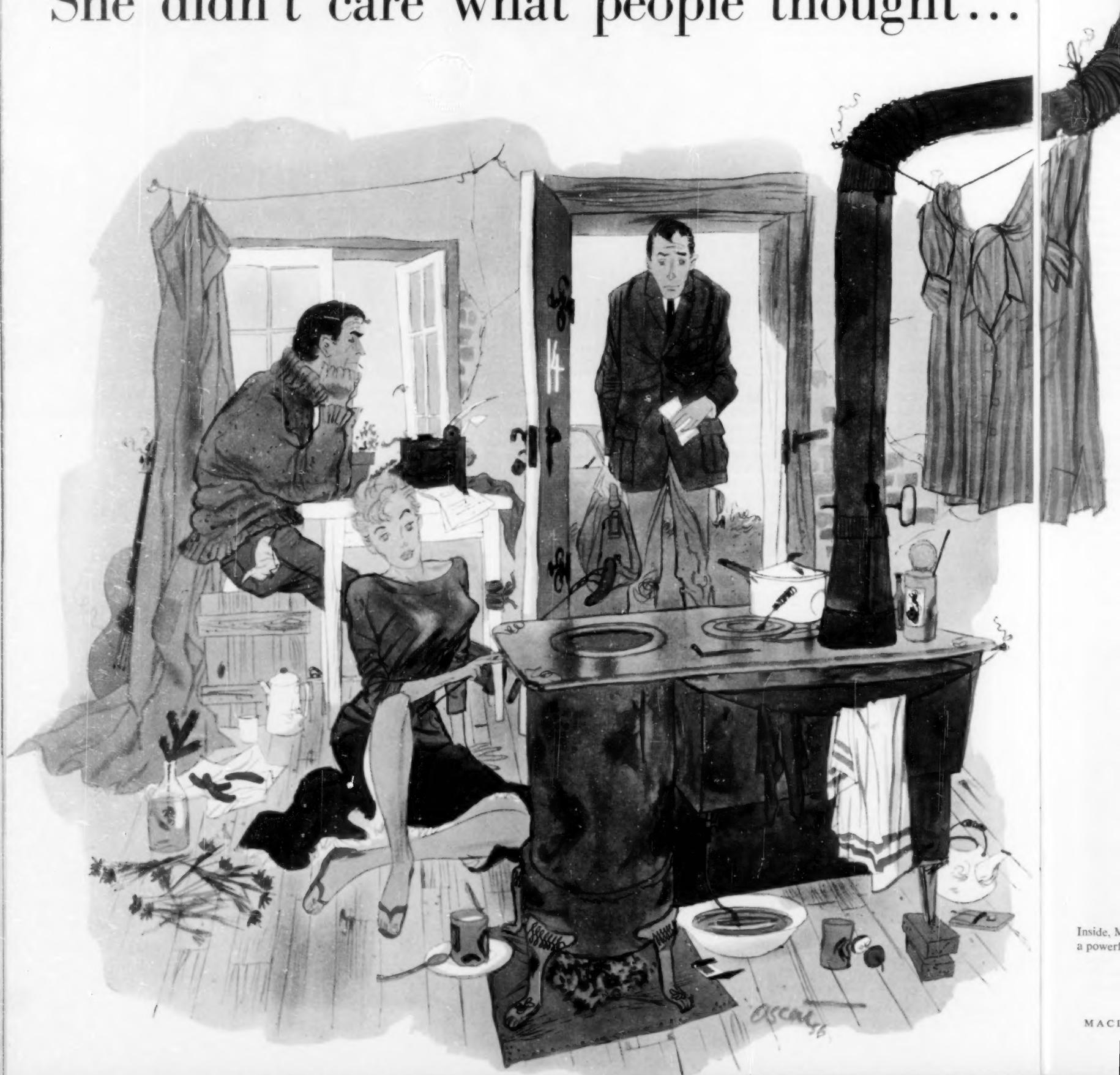
"He wanted to play," the trainer recalls. "All of a sudden he liked everybody. He'd whinny and paw and practically ask you to take him out of that stall." *continued on page 44*





"You really know the poet Cleghorn?" said Mordish excitedly. "I'll write you a letter to him," said Bellinger.

She didn't care what people thought...



Inside, M
a powerf

MAC

BY RONALD R. SMITH

ILLUSTRATED BY OSCAR

... she just liked to be natural. Mordish had never looked at it that way,

but he found it surprisingly easy to learn

BELLINGER, wearing a filthy duffel coat, was standing beside one of the Landseer lions in Trafalgar Square when Mordish spotted him. A few pigeons pecked desultorily around him. A light drizzle fell on him. He stood head bowed like a penitent sinner. Mordish who had been at school and university with him recognized from the posture that Bellinger was indulging in his hobby of thinking.

"Hello, Bellinger."

Mordish was delighted. He had not seen Bellinger for some months. He was precisely the man he wanted to see. Momentarily Bellinger seemed incapable of relinquishing his train of thought (Socrates had the same defect but much worse), but finally he looked up and inspected Mordish critically through his thick lenses.

"Hello, Fowler."

"Mordish," Mordish said, hurt.

"Well, Mordish then, Mordish. Hello, Mordish."

They exchanged a few observations—slightly acid on Bellinger's part—on life. Then Mordish dragged a slender volume out of an inner pocket, held it out for Bellinger to see the title:

divagations
by
geoffrey cleghorn

"I'm excited, Bellinger. I've discovered a new poet. The penetration of his vision makes you feel dizzy, positively sick."

He opened the book.

"Read this, Bellinger. 'Requiem for an absence.' Cleghorn looks clean through the spatiotemporal world of appearances at ultimate reality just as you or I would look through a window."

"Cigarette, Mordish?"

Mordish gave him one.

"Listen, Bellinger, what I'm telling you is exciting. Cleghorn is an authentic seer."

Bellinger scraped the sodden hair away from his forehead.

"Care to meet Cleghorn, Mordish?"

Inside, Mordish saw an alarmingly pretty girl toasting a sausage while a powerfully built young man glared at a typewriter.

"What! You know him?"

Bellinger's hair had wet his fingers. His fingers had made his cigarette sodden. He threw it to the pigeons.

"I was able to bring a little influence to bear in getting *Divagations* published for him."

"What's he like, Bellinger?"

Bellinger took a tweed cap out of his pocket, rubbed his hair vigorously with it and put it back in his pocket. He looked about him leisurely.

"Peculiar people, Mordish, our ancestors. Strewn the place with effigies of lions. Extremely odd." He shrugged his shoulders. "Cleghorn is quite a striking man. He has much the same cranial formation as myself. If you like I'll give you a letter of introduction to him."

"Why can't we go and see him?"

"Because he's not here. The invincible provincialism of London disgusted him, naturally enough. I've developed a technique for ignoring it myself. He lives in a cottage at Plodding, a little village sixty-three and a half miles from here. Can you read a map? But no, of course not. Come."

"I say, listen, Bellinger—"

Bellinger was already clumping briskly across the square. He remained in a Socratic trance until he led Mordish into a little coffee shop. It was brand new. Mordish did not like it at all. It made him feel nervous, alien. Metalwork glittered; the color scheme was subtly menacing; it smelled indiscreetly of coffee.

"I say, Bellinger," he whispered.

"Is chatter indispensable, Mordish? You're worse than my father."

Bellinger began to write rapidly with a stub of pencil on one of the double pages of a notebook bound in shiny black American cloth. When the waitress came he told her without looking up: "We're waiting for friends." Mordish blushed and plucked at his tie.

Bellinger covered the two pages, ripped the sheet out and folded it. He sealed it with cellophane **continued on next page**



"You've been messing about again," Cleghorn growled.

"I've got my own career," she said.



She stretched herself out on the sleeping bag.

"It's just like lying on the Mediterranean Sea," she sighed.

Maclean's Movies

RATED BY CLYDE GILMOUR



BEST BET

The Solid Gold Cadillac: Judy Holliday, younger and prettier than the character in the stage production, is no less amusing in her custom-tailored role as warmhearted Little Miss Nobody who tangles with a squad of big-business bandits. Paul Douglas is a bewildered tycoon who finds himself fighting stalwartly at her side. Broadway's Abe Burrows has wittily adapted the play for the screen.

The Bad Seed: Child star Patty McCormack's portrayal of an utterly heartless little killer in pigtails is a real spine-tingler. But the eerie impact of the novel and the Broadway play is weakened in the screen version by a new synthetic ending, followed by a silly epilogue presumably intended to send the customers home chuckling instead of shivering.

Dance Little Lady: A complicated British melodrama about a crippled ballerina (Mai Zetterling) whose manager-husband (Terence Morgan) is a sneering rotter in the ripe old hiss-the-villain tradition. As their talented daughter, Mandy Miller again proves she is one of the most gifted juveniles in the movies, but her opportunities are limited.

Run for the Sun: There is a fair amount of entertainment in this suspense yarn about a Hemingway-type novelist (Richard Widmark) who becomes a human target for a gang of fugitive war criminals in Mexico. A shapely magazine writer (Jane Greer) shares his perils, with Trevor Howard as the No. 1 baddie.

The Werewolf: Injected with "wolf serum" while unconscious, an accident victim soon finds himself turning into a slavering, snarling man-beast on the slightest provocation. Rating: poor.

GILMOUR'S GUIDE TO THE CURRENT CROP

The Animal World: Nature story. Fair.

Autumn Leaves: Drama. Good.

Away All Boats: War at sea. Fair.

The Birds & the Bees: Comedy. Fair.

The Bold and the Brave: War. Good.

Carousel: Music-drama. Good.

The Catered Affair: Drama. Good.

The Come-On: Crime and sex. Poor.

D-Day, the Sixth of June: War and romance. Fair.

The Eddy Duchin Story: Musical biography. Fair.

The First Texan: Frontier drama. Fair.

French Cancan: Music-drama. Good.

Gaby: War romance. Fair.

Golden Link: Mystery. Poor.

The Great Locomotive Chase: Civil War adventure. Good.

The Harder They Fall: Drama. Good.

Invitation to the Dance: All-ballet, no-talk musical. Fair.

John and Julie: Comedy-adventure. Good for children.

Johnny Concho: Western. Good.

Jubal: Western drama. Good.

The Killing: Crime drama. Excellent.

The King and I: Music-drama. Tops.

The Ladykillers: Comedy. Good.

The Last Ten Days: German drama about Hitler. Excellent.

Leather Saint: Comedy. Fair.

Lucky Kid: London drama. Fair.

Magic Fire: Musical biography. Fair.

The Man Who Knew Too Much: Crime and suspense. Excellent.

Meet Me in Las Vegas: Comedy with music and ballet. Excellent.

Moby Dick: Semi-mystical drama of whaling men. Excellent.

On the Threshold of Space: Factual science thriller. Good.

Patterns: Business drama. Good.

Please Murder Me: Suspense. Poor.

The Proud and Profane: Sexy war romance. Fair.

The Proud Ones: Western. Good.

Ransom: Suspense drama. Good.

Richard III: Shakespeare. Tops.

Safari: Jungle melodrama. Fair.

The Searchers: Western. Fair.

Simon and Laura: Comedy. Good.

Somebody Up There Likes Me: Crime-and-boxing biography. Good.

The Swan: Romantic comedy. Excellent.

That Certain Feeling: Comedy. Fair.

A Town Like Alice: Drama. Fair.

Trapeze: Circus drama. Good.

Tribute to a Bad Man: Western. Good.

23 Paces to Baker Street: Mystery and suspense. Good.

While the City Sleeps: Newspaper-and-crime drama. Fair.

Wild Dakotas: Western. Poor.

tape, a roll of which he always carried for emergencies. On the outside of the letter he wrote:

geoffrey cleghorn
14 pie lane
plodding

"I suggest you stay a week with Cleghorn," he said.

"Stay with him, Bellinger!"

"Certainly. You'll be a paying guest naturally. To the world at large, Mordish, poetic genius is a sort of deformity, like having two heads; unless one's morbid one politely ignores it. Cleghorn's probably starving but he pays no attention to pinpricks like that. He's the son of humble parents but an aristocrat to his fingertips."

"Do you think he'd want me to stay with him, Bellinger?"

Bellinger laughed briefly. "If he's in one of his creative periods he probably won't even notice you're there. But you'll have the privilege of observing him, possibly even of handing him things."

He waved to the waitress and said, "Our friends have doubtless met with a fatal accident." He turned: "Order some coffee, Mordish."

Mordish ordered the coffee and was just about to speak when he felt a sinister pain in the neighborhood of his stomach. Bellinger was again writing in his notebook, compiling some sort of list.

"Bellinger, Bellinger, I couldn't stay a week. I'm going to Canada for three months on Saturday."

"Canada can restrain its impatience for a day or two, I dare say."

"I couldn't put it off, Bellinger. My father wouldn't let me. Everything's arranged with my Uncle Alistair."

Bellinger gnawed his pencil and then recommenced writing.

EVERY time Mordish thought of his forthcoming visit to his Uncle Alistair's he experienced this odd feeling of congestion at the lower end of his esophagus. His uncle had visited the Mordishes twelve months or so previously. He was a tall burly man who liked three wines (Sauterne, Burgundy, port, usually) with his dinner and who had a passion for killing things, furred, finned or feathered, which he insisted was his way of showing his profound respect for the creatures. He enjoyed using Latin tags facetiously and went about as though he thought that everybody probably liked him—which struck Mordish as an astonishing attitude.

Mordish was convinced that when he got to Canada—it would be his first visit—he would be surrounded by enormous rich men who would start laughing at the mere sight of him and would absolutely roar until tears came into their eyes when he opened his mouth. He also imagined some entirely different but equally enormous men wearing woollen caps. Were they his uncle's employees? His imagination was uninformative. But they were there, glowering, with enormous hands with thick hair on the backs of the fingers. And they would be so offended by his appearance and manner that they would attack him physically.

He also imagined tall, handsome girls wearing very fine nylon stockings, terribly uninhibited, who would expect him to drive them at fabulous speeds on the wrong side of stark concrete highways in enormous cars full of mysterious buttons, cars that had the air of straining dangerously at the leash even when they were standing still.

Was he perhaps a trifle neurotic? Mordish asked himself.

"I've assumed you'll go by road and

that you don't know how to read a map, Mordish," said Bellinger. "Here's a list of places you'll pass through."

"I go to Uncle Alistair's on Saturday. You don't know my father if you think he'll listen to anything I have to say."

"My father, Mordish, doesn't merely not listen to what I have to say; he is frequently flippant. But one doesn't whimper. Look, if you push off right away you'll be able to stay five days."

"I'd simply have to be back for Thursday, Bellinger."

"Well, four days, four days." Bellinger snapped his fingers impatiently. "You'll naturally pay for a week just the same. I mention that, Mordish, because I sometimes detect a rather sordid attitude towards money in you."

Mordish thought it wasn't true but he felt guilty just the same.

"Pay for the coffee, Mordish; you ordered it."

Outside in the drizzle again Bellinger said, "You'd better let me have five shillings to send a telegram to Cleghorn."

Mordish gave him a ten-shilling note.

Walking alone along the Haymarket toward the underground station in Piccadilly Circus, Mordish felt himself sustained by a certain hopefulness. What could be a better preparation for his ordeal at his Uncle Alistair's than a retreat into the country in the company of this austere contemplative man who had liberated himself from all the superficialities of life in order to see it steadily and whole, to see it—as his Uncle Alistair would say laughing heartily—*sub specie aeternitatis*? Mordish felt his confidence growing. Suppose as a result of this visit he were able to effect a revolutionary change in his way of living.

He trod on the heel of a tall Indian wearing a pink turban. He apologized rapidly. People didn't usually take kindly to his ineptitudes. The Indian flashed his teeth in a friendly smile. An encouraging omen!

PIE Lane was a rutted track between unkempt hedgerows which at first Mordish suspected led nowhere. But he bumped onwards in his little beetle-shaped car which was plastered with mud—his mother, a frivolous woman, had been using it. The lane might possibly lead to a farm. Then he saw two attached cottages. The gable and roof of one had fallen in. The number 14 was painted prominently on the door of the other. (Cleghorn had chosen the number 14 quite arbitrarily because it had a "spare angularity" which pleased him.)

The door was slightly ajar. Through the opening Mordish could see an old-fashioned cooking range. Crouching in front of it a child—no, a girl—toasted a small sausage on a long toasting fork. She wore a black skirt and a long-sleeved black—yes, a girl—sweater. She had short blond hair and was saying to someone Mordish could not see, "This sausage is sweating in a very strange manner."

Mordish coughed. The girl turned her head. She was alarmingly pretty in the contemporary, faintly eccentric style; peaky and pointed with a suggestion that she did not get enough sleep, a mouth that was elastic and ambiguous. She smiled.

"If you've come to fetch the linoleum back, I'm afraid you're too late. It's laid."

"Didn't you get the telegram? This is the house of—" What was the poet's name?

"Cleghorn," a savage bass voice shouted from inside.

"Mordish. Richard Mordish." He held out Bellinger's letter. "Bellinger must have forgotten the telegram. Perhaps this will explain." He blushed and thought

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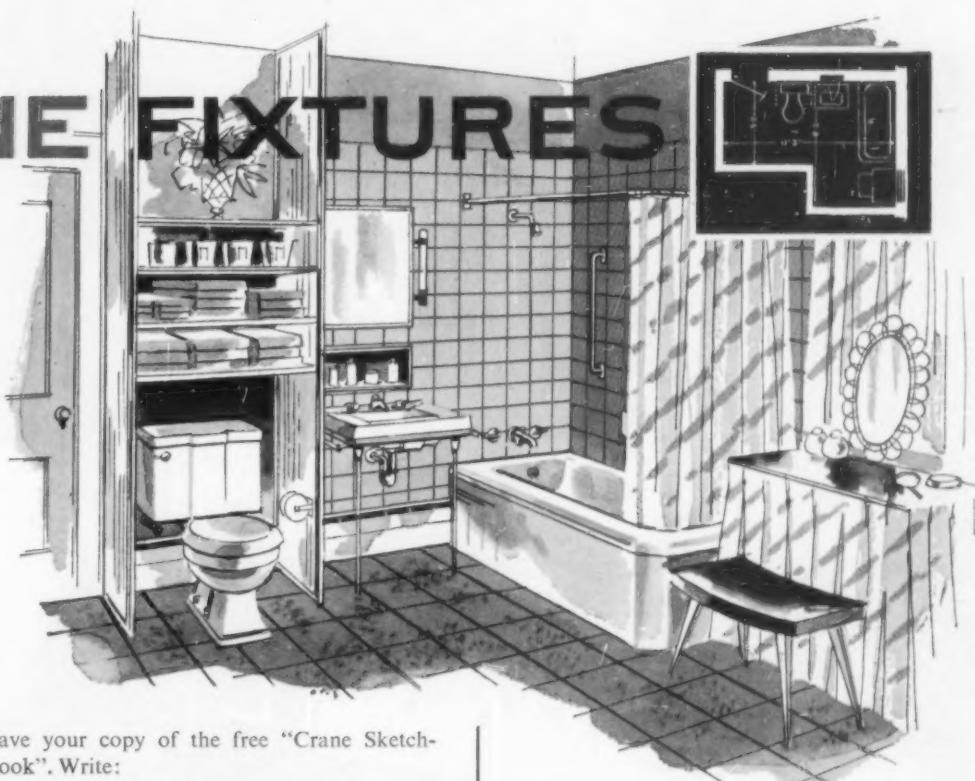
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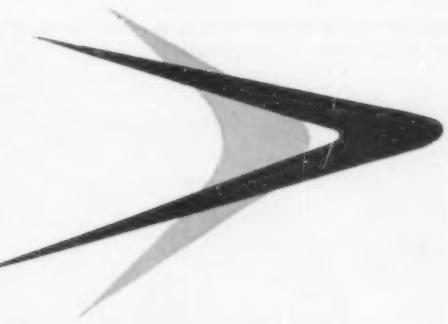
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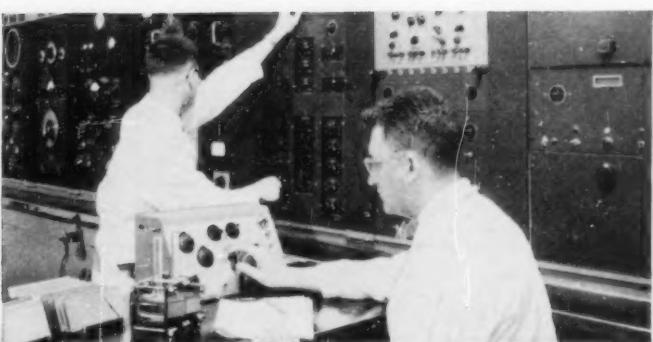
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what an agonizing thing it was simply to live.

The girl got up, slipping a piece of bread she was holding into the pocket of her skirt. As she took the letter she said, "What a charming talent you have for blushing. I try and try. No good. Is that delicious little car really yours? Do come in."

The room was furnished chiefly with a Welsh dresser full of books, and army blankets. Army blankets as rugs, as cushions, as table covers and one was draped over an old sofa. Over the fireplace hung a large framed photograph of a handsome baroque tomb in shiny marble dominated by a winged skeleton in bronze which stood in a casually elegant posture like a welcoming motor salesman.

Mordish glanced over his right shoulder and started. At a table under the window a very powerfully built young man wearing a fawn sweater as thick as an overcoat sat glaring at a tall old-fashioned typewriter that held a sheet of paper with six lines typed on it. His elbows rested on the table and he supported his face between two big fists. His chin had been shaved so closely that though still bluish it shone as though lightly varnished. Without raising his eyes from the paper he said, "Who is it? What does he want?"

"Bellinger sent him," the girl said still reading the letter.

"Who's Bellinger?"

"Bellinger's the one I begged the picture of the tomb from."

"Well?"

"Bellinger's sent Mordish down to stay with us. Mordish is a great admirer of your work but is totally ignorant of its significance. He's a dilettante, an amateur, but perfectly sincere." She looked up from the letter and smiled at Mordish. "He's staying a week."

"Oh," Cleghorn said in a bored bass voice.

"As a paying guest."

"He wants to pay? How much?"

"How much are you prepared to pay, Mordish?" the girl said.

"I'll pay whatever you think just of course."

"What's the matter with him?"

"Would you consider four guineas a day just?" the girl said.

Mordish was horrified. "Yes," he said. "You would!" She laughed. "You really would!"

"Has he walked here? He looks exhausted."

"No. He has a sweet little car. And we're going into the village in it, aren't we, Mordish, to buy some pork sausages? Several pounds. And a frying pan." She caught Mordish's arm and urged him to the door.

"Don't you drive," Cleghorn shouted after her ferociously.

She slipped into the car behind the wheel. "You don't mind, do you? I haven't a licence but I drive exquisitely."

In second gear they squealed up the track, swung in a circle in a farmyard, and squealed bumping and swaying down the track again, the hedge rattling against the coachwork.

"Yesterday they had some beautiful peaches at Bunter's," the girl said. "We must have some of those too. And a bottle of gin from the Stag at Bay."

In the village she yielded to the temptation to buy, in addition, a bottle of white port, some cigarettes, a large bunch of daffodils, another of chrysanthemums and a coconut.

CLEGHORN was missing when they got back to number 14. He had left a sheet of typing paper on the table bearing the message in the right-hand corner, minutely written and heavily framed in black lines:

gone to norahs
for lunch. dont
touch my type-
writer.

The girl threw the message into the fire.

"Norah is a sheep in lamb's clothing but she cooks scandalously well." She unwrapped the new frying pan. "It seems monstrous to defile it with pork sausages it's so chastely beautiful."

The sausages stuck rather badly in the new pan. They had forgotten the bread. But there were some old crusts left and they had a charming little lunch of sausages, port and peaches, with flowers strewn on the table. After his fourth plastic eggcupful of port the thought came to Mordish that life was a precious fragile thing, full of insoluble mysteries but rich in a strange melancholy beauty. He said with a boldness that astonished him. "May I wash the dishes?"

"Naturally I must say, 'no.' But you know what a woman's 'no' is worth," she said and went and sat down in front of Cleghorn's tall typewriter.

She ripped out Cleghorn's sheet and inserted a new one. Resting her elbows on the table and supporting her face between her fists she sat staring at the blank paper. After a long silence she said, "Can you suggest something for me to tell the girls they ought not to do?"

"I beg your pardon."

"I write cautionary little pieces for a girls' paper. Never mind. I know what I shall tell them. I've only told them once before and I shall put it differently this time. They must never laugh at questionable jokes or innuendo but look



the speaker coolly in the eye, say without a trace of anger in their voices, 'You cannot be aware whom you are addressing,' and then walk away with quiet dignity . . . Don't look at me while I'm typing. My face goes wooden."

She began to type furiously.

She stopped, ripped out the sheet and threw it into the fire.

"I'm not in the mood. I'll do it later. I'm in the mood to be far too strict with them. I haven't shown you your room yet. I'm giving you the one with the new linoleum. Leave the frying pan until later."

He followed her up the steep flight of stairs, wiping his hands on his handkerchief. She flung open a door: "There."

In addition to the new linoleum, which simulated marble paving, the room was furnished with a mahogany chest of drawers more or less painted white, two chairs with burst cane bottoms, a bucket and a long narrow galvanized bath which hung on the wall.

"If you put your sleeping bag over there it will be splendid. Because when you awake in the morning, if you raise yourself very high on your elbows, you'll be able to look out of the window and see the tip of Grey Nose, if it isn't misty which unfortunately it usually is."

Mordish blushed and made one or two restricted movements with his right hand. "Actually, Bellinger never told me—"

"You didn't bring a sleeping bag! How very extraordinary of you. Never mind. We'll go into Beddington and buy one. They have some delectable ones at Fullalove's."

Downstairs again she said, "I always wash myself before going into Beddington because I might run into my uncle who lives there. He's rich and he might leave me some money. But not if he sees me going about dirty. He detests that. I'm not an edifying spectacle when I wash so you may prefer to go into the garden."

MORDISH walked up and down the path of the derelict garden, past the dry dead stems of Michaelmas daisies, the cabbage stumps, the thicket of raspberry canes and gooseberry bushes on which the flamelike green of new leaves was pricking. The drizzle had followed him from London but in Plodding it took the form rather of a heavy mist which swept in ghostly waves across the meadows and ploughland and obscured the hills and the distant horizon.

Mordish tried to sum up the situation in which he found himself. He had come with the idea of sharing a hermit's cell and there charging himself up like a battery with tranquility and fortitude. He had miscalculated obviously. He must try to adapt himself to the new situation, to draw benefits from it. So far he had been anguished, enchanted, finally bewildered. How was it that in comparison with the girl he seemed to be perpetually tied up in a sort of spiritual strait jacket? How was it that in some way she seemed to live life while he was, so to speak, lived by it? What was the secret? He kicked a gooseberry bush. Anybody, he thought bitterly, but a half-wit would have had at least a clue by this time.

He could hear the girl singing as she washed herself. She sang in a pure, schoolgirl treble some old, half-familiar tune. He moved towards the cottage to hear her better.

Back and side go bare, go bare,
Both foot and hand go cold . . .

It was the famous sixteenth-century Cambridge drinking song, and because he knew that the next line ran, "But belly, God send thee good ale enough," he felt somehow that it would be indeli-



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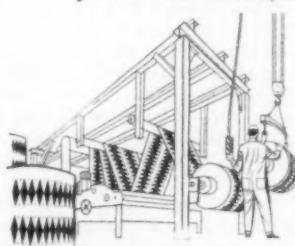
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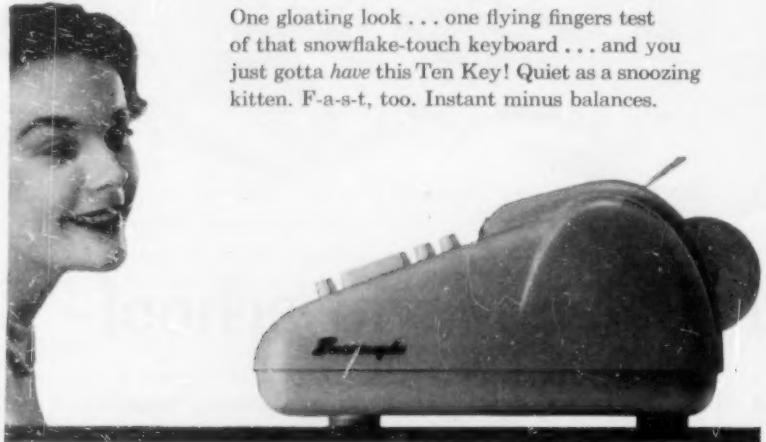
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MACLEAN'S

"Wait a minute, who's the boy singing off key?"

cate to continue listening. He hurried back up the garden path. A voice, the schoolgirl treble still carrying over from the song, called, "Ready, Mordish," and he hurried back down again.

As Mordish pushed open the back door—there was only one room on the ground floor—Cleghorn entered at the front door. He thumped a basin tied up in a table napkin onto the table.

"I've brought you some steak-and-kidney pie from Norah's."

The girl was combing her hair in front of a looking glass hanging in the back window. Without turning she said, "She can keep her steak-and-kidney pie."

He frowned heavily at the girl's back. "You didn't say that last Monday."

"I may not say it next Monday, but I say it today."

Cleghorn sat down at the tall typewriter.

"You've been messing about here again."

"I have my own career, you know."

"Then it might be a good idea if you had your own typewriter."

Mordish could see the girl smiling happily to herself in the looking glass. Cleghorn found his own sheet and slipped it into the machine. Typing slowly and rhythmically he added three and a half lines. Then he slipped an oilcloth cover over the machine.

"Don't touch it again." He stood up. "I'm going to Keeble's to borrow his Greek dictionary. Mine's no good."

He walked across the room to the girl, who had turned and was watching him. He stood scowling down at her. She peered up at his face as though it were an interesting inanimate object.

"If you go out again in that messy little car don't drive," he said. "Driving is not one of your accomplishments."

"You know I'm quite sure your hair's receding."

"No it isn't."

He turned and went out of the door.

The girl removed the cover from the typewriter, read what he had just added, and replaced the cover. Mordish leaned against the sink, trying to appear absorbed in his own thoughts.

"The trouble is," the girl said, "The Poet is trying his hand at a new art form. He's trying to write a play. He's trying to write a modern version of Sophocles' Oedipus the King—you know, with bus drivers, chorus girls, deck stewards, stockbrokers and passé film actresses in it. And he's out of his element. He's frustrated. And by some peculiar mental act of transference he convinces himself that I can't drive. Oh look, the sun's coming out."

As they approached the muddy little car she said, "Of course, it's quite possible that it would depress him if I were smashed up. On the whole I think I shan't drive."

She added earnestly as Mordish pressed the starter, "I was lying when I said his hair was receding. It isn't."

It occurred bleakly to Mordish that there wasn't a soul who cared if his own hair receded. Not even his mother. She would simply be indignant. The hard truth was, he fitted in nowhere.

The girl was silent for most of the drive to Beddington. Once she laughed and said, "Out of pure politeness, I told The Poet that I knew Greek. Then when he took up with this Sophocles thing he discovered that I didn't know alpha from omega and he was furious. He nearly threw me out. He doesn't know the meaning of politeness." She laughed again.

For some reason the incident, the laughter, made Mordish feel as dull as ditchwater. His personality, he reflected, was stale, flat, soggy beyond belief. If his Uncle Alistair's pals laughed at him they would be absolutely right. And if the others, the ones in the woollen caps, didn't throw him into a lake they would be shirking their duty.

IN BEDDINGTON, which was a sophisticated little quasi-country town, they began by buying a few necessities: bread, some Turkish delight, a dressed crab, a carton of stuff for making porridge and a pretty little flagon of apricot brandy. They went on to Fullalove's. The sleeping bag, chosen by the girl, had a bellows-inflated mattress attached to it; it was stuffed with "genuine eiderdown," covered with a "special fabric" woven with a "cotton warp and a nylon weft." Mordish foresaw the need to get a grip on himself for the moment the price was revealed. He paid almost without blanching. They drove on to a filling station from which Mordish sadly telephoned a telegram to himself to return immediately; reckoning the rate at three and sixpence an hour he had only enough money left to stay until 2.30 a.m. the following day.

They had tea in a cinema lounge. The elderly waitress took a great fancy to the girl and refused to charge for the two cakes she had eaten, on the grounds that the icing had been cracked.

They went in to see the film which was concerned with the unrequited love of a millionaire for a lovely chicken farmer. But the millionaire had such a puzzled look on his face that the lovely chicken farmer, who admitted taking a healthy pleasure in the suffering of millionaires, seriously doubted his ability to suffer acutely and consequently could extract no pleasure from the spectacle.

The girl laid her head on Mordish's shoulder and went to sleep. Her hair, Mordish noted, smelled of freshly husked chestnuts. She slept through the film and into the intermission. Mordish's neighbors looked at her in the amused compassionate way usually reserved for children, and smiled in the friendliest manner at Mordish. She charmed everybody, Mordish thought. Was it because she obviously made no effort at all to charm people?

She awoke in the middle of an educational film about bananas, watched it through with interest, and they left. In the car she went back to sleep again. Mordish continued to feel sad and, in addition, frustrated. Another twenty-four hours at number 14 would have put him in possession of information, of some psychological secret, of vital importance. He was convinced of it. He could feel something stirring in his mind, but without fertilization it would surely die.

The jaundiced street lights of Padsey Bridge awoke the girl.

"You mustn't imagine I'm jealous of Norah," she said the moment her eyes opened. "You didn't, did you?"

"No."

"She's a youngish widow, not bad looking, and she has a house with a beautiful orchard and she has money of her own—whereas I've only an absurdly tiny allowance from my father who's in Negri Sembilan—and she can cook marvelously. But she's one of those silly women who behave as they think other people think they should behave. She ends up by being scarcely there at all. Do you see?"

"Yes." He did not see. But the cryptic utterance made whatever was stirring in the back of his mind stir convulsively for the moment. Then it fell back into a state of lethargy again. The girl went back to sleep again.

She did not awake again until they reached number 14.

CLEGHORN was out again. Immediately she had switched on the light the girl raised the cover of Cleghorn's typewriter.

"He's been back. My goodness, he's

prolific today. Five more lines. I expect he's gone to help Ballard decoke his van. He borrows it sometimes to go up to London to see Grossemeister about some music that Grossemeister's composing."

While Mordish worried because his telegram hadn't arrived the girl began to stir up the dying fire and throw on some coal.

"Go and get the sleeping bag, Mordish. Aren't you interested in it at all?"

Mordish detested the sleeping bag. "I like it very much," he said.

She unrolled the bag in front of the fire, pumped it up and stretched herself out on top of it.

"It's like lying on the Mediterranean Sea, or it would be if I hadn't put too much air into it." She stiffened suddenly, pointed across the room and said, "What's that?"

Startled, Mordish said, "What?" The girl said, "It's a telegram. I hate telegrams. Read it." She lay back, frowning.

Mordish picked up the telegram, which had evidently fallen off the typewriter

table. "It's for me," he said, blushing. He read it and handed it to the girl.

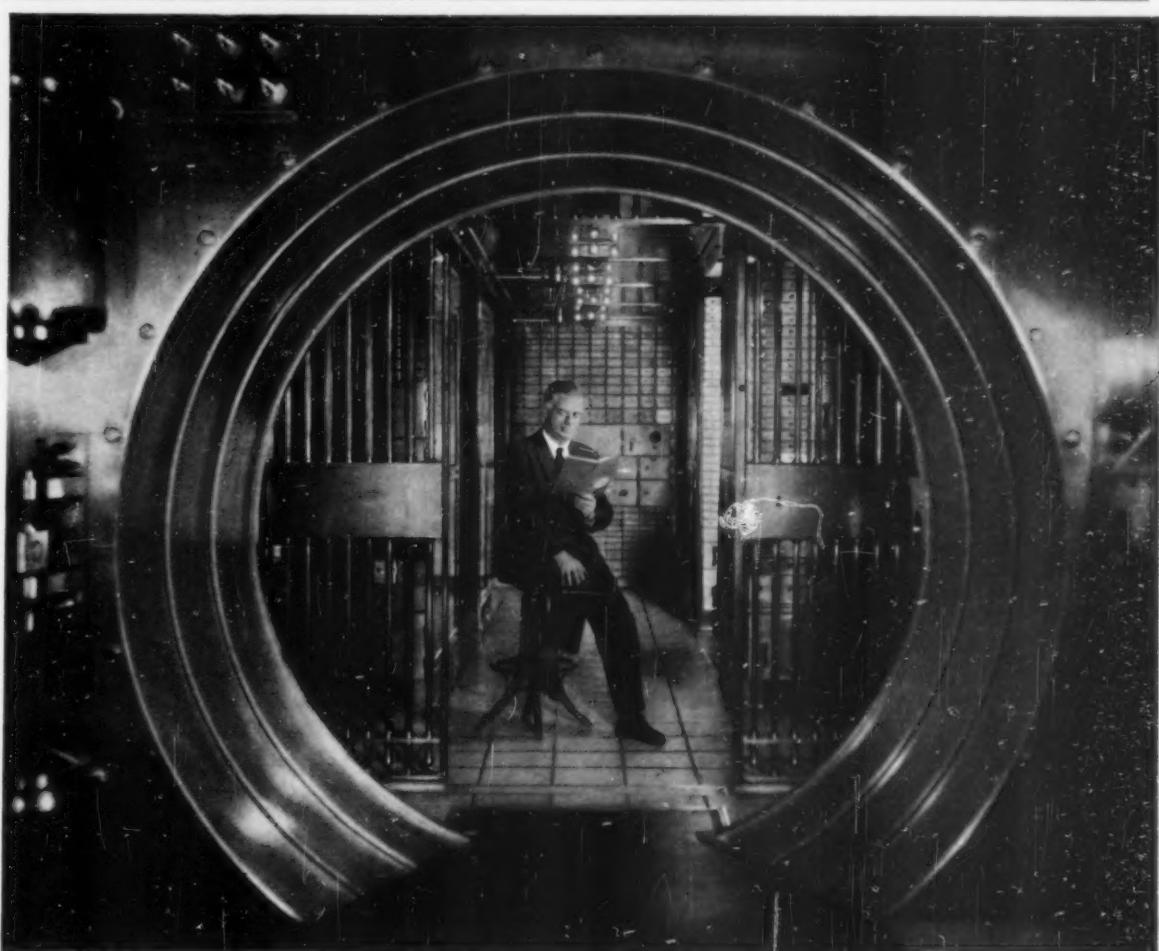
"My goodness, he's imperious, isn't he? You're not going, are you?"

The telegram read: RETURN HOME IMMEDIATELY REPEAT IMMEDIATELY FATHER.

"I'll have to," he said, blushing. "It won't be anything though."

The girl lay silently looking up at the ceiling. Cleghorn came in, blinking in the light.

He took the cover off his typewriter and inspected his work. Without adding



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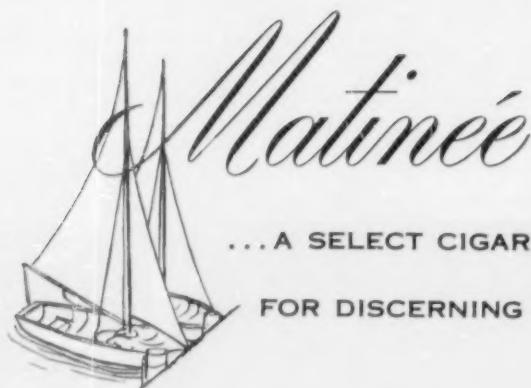
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"If you think he's an easy man to marry, you're mistaken." She smiled. "I have several plans—"

anything he replaced the cover and said, "I'm starving. Unless I'm mistaken I've had nothing to eat since lunch."

He went to the table and started to cut himself some bread.

"We're losing poor Mordish already," the girl said.

Cleghorn smeared a little crab on his bread. "Oh."

"Well, is that all you're going to say?"

"No." Cleghorn switched the bread to his left hand. "Hope you haven't been too bored." He shook Mordish's hand warmly. "When you come again we'll have some good long talks about Oedipus."

Mordish thanked him. He wandered away towards the door. The girl raised herself on her elbows. "You're not going out again?"

"Got to go up to the farm to help old Swaffham write a pained letter to the income-tax people." He went out, eating his bread.

"My life's like a railway station—full of horribly depressing departures. Ah, well." The weight of her body made the air whistle through the valve of the mattress as the girl opened it.

Mordish declined an offer of supper and another to take the bottle of gin with him. The girl followed him to the car and got in.

"Can I take you somewhere?" he said, surprised.

"Home, if you don't mind. It's on your way."

"Home?"

"Well, naturally. I'm only The Poet's housekeeper, you know. And even that without his consent. If you think he's an easy man to marry you're ridiculously mistaken. He's eaten up with all sorts of scruples. But he's very fond of me in his own labyrinthine—that's one of his words but he's never used it in this context—in his own labyrinthine way. And I have several plans." She smiled thoughtfully.

Mordish was severely depressed. He dropped the girl at the wrought-iron gates of "Surinam Lodge" where she lived with her aunt who was, it seemed, a BSc, perfectly amiable, and kept bees.

"When you visit us on your return from Canada you will be a guest *tout court*. If we're not rich enough to feed you in the manner to which you are accustomed, I shall take you to Norah's occasionally so you won't starve altogether." She shook hands and ran up the drive, disappearing almost immediately in the darkness in her black clothes.

NORAH. The name again set up a violent stirring in the back of Mordish's mind. He drove away in a state of painful suspense, like a man waiting for a sneeze that keeps announcing itself and then withdrawing at the last second. A mile down the road he pulled up. What had the girl originally said about Norah? "She behaves as she thinks other people think she should behave."

He got out of his car and looked up at the constellation that, because it is shaped like a saucepan, is called the Great Bear. But surely we all—or almost all—do the same as Norah. Wasn't it because the girl did not that she stood out so prominently from the rest? Certainly he behaved as he thought other people thought he should behave. Always had. Even as a schoolboy he could remember behaving in a sort of roistering

manner—which actually bored him—because he supposed other people expected schoolboys to behave like that.

And take his father. When Beldrade came to dinner his father was a suave man of the world. But with Conningsby he put on a jolly undergraduate air. Which was the real, the essential Mordish senior? Neither obviously. The real Mordish senior no doubt lay in some depths of his being which his father had probably never explored at all. Take his mother. His Aunt Kitty. Take even Bellinger. Take almost anybody.

Mordish got back into his car, started up and pulled in behind a bus. He jogged along at twenty miles an hour.

That virtually everybody should be behaving in this singularly half-baked manner Mordish found hard to swallow. But there it unquestionably was. Everybody—almost—was acting an arbitrary series of roles imposed on them by other people, by friends, relatives, strangers. People who called themselves individuals were in fact loosely bound bundles of fictions. Scarcely anybody existed positively, in his own right. Here and there an odd person—such as the girl—refused to have his behavior imposed from outside and, instead, looked inward, consulted his essential being—which was not the same thing as consulting his memory or asking himself what was the generally acceptable behavior in given circumstances. Mordish glimpsed a future in which Mordish was unadulterated Mordish. He shook his head in wonderment and ran gently but firmly into the back of the bus. Gently enough to hook his car on to the back without much damage; but firmly enough to give his head a sharp clout against the framework of the offside door.

A scintillating golden ball appeared to Mordish. It was made up entirely of Great Bears, and he had the impression somehow that it belonged to his Uncle Alistair. He heard a chatter of machinery—lathes, looms, the whine of electric motors. The sounds slowly diminished; abruptly stopped. He was sitting behind the wheel of his car, which was apparently attached to the bus.

He was surrounded by people. He heard a rabble-rousing woman's voice saying: ". . . driving like a lunatic. We might all be dead."

"Too many Great Bears," he heard

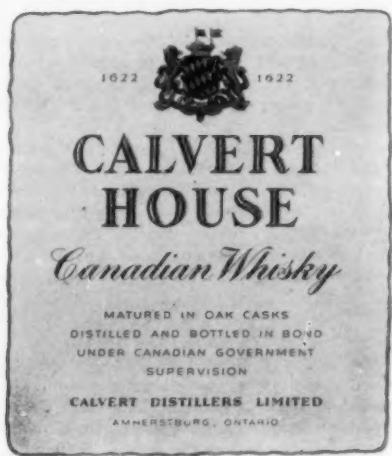


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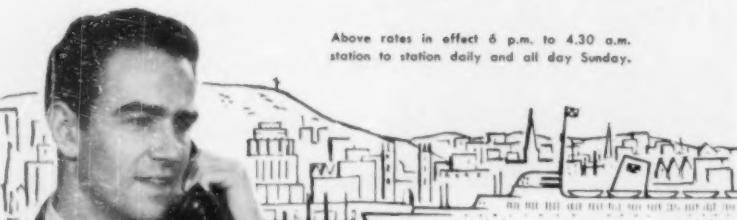
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himself say rather foolishly.

"There you are. He's been at the White Bear in Padsey Bridge and had too many. He says so. He's proud of it."

"Great," Mordish corrected her with an unnatural stubbornness that he could only deplore. "Great."

"You see! 'Great,' he says. He is proud of it. Oh, it's shameful. People like him would take your life with a silly drunken grin on their faces." She leaned forward until her head was almost inside the car window. "Oh, you horrible thing," she said.

Mordish examined the woman through his eyelashes. With the shadow of the nose broadly bisecting the upper lip, the face horribly resembled the flylike face of Hitler. Abruptly, rather sickeningly, he realized the position he was in: surrounded by hostile bus passengers, with this born leader of women breathing an odor of fish and chips in his face and trying to stir up hatred. If ever a situation called for an expert technique this was it. He shook his head. He really hadn't developed his new technique yet. Besides his head ached. He needed practice in simple situations. No, tomorrow would be soon enough to try that out. But if he didn't use it now what was he to do? Again he shook his head.

"Don't you shake your head at me," the woman said.

In spite of himself he began to try to get in touch with the inner reaches of his personality, the essential Mordish. It had not occurred to him that it might be difficult to establish an easy relationship with one's essential being. He waited. No response. Did it not mean: lie low; do nothing; this is a time for mas-

terly inactivity? It must be that.

He sighed noisily, relaxed and closed his eyes in order to carry out the injunction as completely as possible.

The immediate and total success of his new technique struck Mordish as positively uncanny. He heard a man's voice with something of a military crackle about it say, "Damn it, woman, can't you see the lad's dazed? In any case he only gave us a bit of a nudge." And the crowd of passengers uttered little murmurs of unmistakable sympathy and assent.

Mordish could scarcely believe it. If he could get a result like this when he had a thumping headache and when he was a mere beginner, what might he not expect in future? He opened his eyes cautiously. The head of the Hitler-like woman had disappeared into outer darkness. A young woman was opening the door of the car. She said she was a nurse. She smelled of lilies of the valley—synthetic possibly but no less welcome for that. He inhaled the scent luxuriously. He felt a warm breath touch his eyelids. Cool fingers gently brushed the hair back from the trifling bump above his right eye. It was all extraordinarily agreeable.

There was only one small cloud on his horizon. He could not help wondering if he would have behaved so very differently in the days before his enlightenment. The essential Mordish told him not to be an imbecile, not to ask foolish questions. So he banished the cloud and said with cool imperturbability—the tone and manner of which he borrowed from the air-force pilot in the film he had seen that afternoon—"It's nothing. Nothing at all, I assure you." ★



For the sake of argument continued from page 4

"With university resources stretched to the limit, will we put up with so many failures?"

of literature and the arts or by the mysteries of science, and we need to educate them as professors and researchers. We need those with a love of learning, outgoing instincts, endless patience and a kinship with youth, and we need to educate them as teachers. We need clergymen, historians, meteorologists, foresters, social workers, and many more. But men and women cannot pursue these professions without formal education. That is why we need, in the universities, the whole group who have the intellectual ability and the moral stamina to profit from university courses.

We are not now getting "nothing but that group." Last year, in one faculty of the University of Toronto, six hundred students who had passed Ontario Grade XIII or equivalent examinations were admitted to the first year; two hundred of them were unable to complete the year successfully. That is a glaring example, but virtually similar situations can be found elsewhere. The students who failed have wasted their time and their instructors' time, their money (or their parents' money) and the taxpayers' money—for the taxpayers pay from one quarter to three quarters, depending on the particular institution, of the tuition

costs of Canadian universities. Moreover, the presence of students who are not keeping up with the work lowers the tone and lessens the effectiveness of the teaching.

Soon we will have double the present number of pupils leaving the secondary schools, and the universities' resources in space, time, equipment and personnel will be stretched to the very limit. Will we continue to put up with so many failures when every one of them will be keeping another student out of university? What can be done? We cannot predict closely enough, with our present knowledge, whether an applicant who has passed entrance examinations really has the brains for college work—whether his high-school preparation has stretched and strengthened his intellectual powers. We cannot tell whether his urge for higher education is sufficiently deep-seated that he will discipline himself, use his time aright, and make the arduous, long-continued effort that is necessary for success.

Some would say, take nothing but the first-class honor students, the cream of the crop, and then there will be no failures. But if we did that, in many courses there would be no students; and we would lose the good pupils who ob-

tain second-class standing. They often do very well at university, and some of them—the "late starters"—do brilliantly. The question "Who should go to college?" cannot be answered simply by deciding what will be easiest for the col- leges.

The country's needs in the various professions can be predicted with fair accuracy. The number of high-school matriculants can be predicted with even greater accuracy. In a totalitarian state it would be comparatively simple to plan for the filling of the former demand from the latter supply. In Russia, for example, students of ability and promise are selected, groomed and directed to university to be trained for specialized careers. Our hatred of their autocratic methods should not blind us to one fact: from all the evidence, the Russians are keenly aware of the value of their human resources. In the sciences, pure and applied—the field in which all the English-speaking democracies are woefully short of leaders, teachers and recruits for an economy increasingly based on science—the Russians are training adequate numbers for their society; and (on the testimony of Lewis L. Strauss, chairman of the United States Atomic Energy Commission) their training is no whit inferior to that given in universities of the Western world.

I do not like to think that we in the democracies set a lower value on the individual and his capacity than the Russians do. We will never compel anyone to take a certain course or enter a certain profession. But I wonder whether we should not try to make "equality of opportunity" a reality rather than an oratorical flourish. That would mean providing money to send gifted students to college, whatever their economic sta-

tus. It would mean more than that. It would mean paying more attention to them while they are at school. Gifted students are the underprivileged in most Canadian schools. There are special classes, special teachers, even special schools, for the handicapped, but there is a strong prejudice against any special provision whatever for those of superior intelligence. The bright boy or girl, in all but a small percentage of Canadian schools, is in a large class where the teacher spends half the time repeating, for the benefit of the average and the dull, points that the bright one has already grasped. He is bored. He becomes mentally lazy. His mind is not being stretched. He is kept back with his chronological age group even though his mental age is above the others. His teacher will be taken to task if the lowest in the class fail, but not if the brightest in the class fail to take honors; and the latter is the more expensive and regrettable failure of the two. The timetable will make it difficult or impossible for the good mathematics student to take extra work in problems, or for the good language student to take German, Spanish or Greek.

I do not blame the harassed teachers for neglecting the gifted—it is almost inevitable that they should do so unless some provision is made for special attention to those in the top ranks of the group. Teachers of those students should have time for the demands of that teaching.

In pleading the claims of the superior students, I am not speaking of a negligible number. The report of the Royal Commission on Education in Ontario includes a chart that places twenty percent of Canadian children in the categories of "gifted" or "superior" with regard to their

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ability to learn—one fifth of the entire school population. Our university entrants will be drawn from the upper fifth of those who are in schools, and, for the sake of our national welfare, health, progress and security, we should do more for those students than we are doing at present.

The universities are not prone to cast all the blame for failures on the schools. We have examined ourselves, our teaching methods and procedures. We have striven to make an easier transition from high school to university work. I have begun to suspect that, in our anxiety, we may have overemphasized the difficulty and underestimated the freshman. University studies are not merely an extension of secondary school work, starting with—to use an Ontario example—a sort of Grade XIV. The university freshman is expected to work under his own steam, as a member of a scholastic community that exists for the extension and transmission of knowledge. His promotion to this estate should be the beginning of a new way of life. The university should be a challenge to all his powers, and if it is bewildering at first, the shock of this experience can be very salutary. I suspect that we lose more than we gain by relieving the shock. If from the very begin-

ning our students were confronted with the real facts of university life, we would probably get better results than we do with much orientation and spoon-feeding. Freshmen who are treated as schoolboys and schoolgirls will respond as such, and we will have a continuance of the immature and irresponsible behavior that gives the colleges—deservedly—a bad name with the public.

What we need most is some better method of selecting our students, some method that will make a closer prediction of success or failure in academic work. In the United States, the problem of selecting freshmen is much more complex and difficult than it is in Canada. Many American universities receive applications from candidates who have attended secondary schools anywhere from Maine to California and from Texas to Alaska. To evaluate their secondary-school certificates becomes practically an impossible task. Faced with this situation in its early stages, a group of more than eighty American universities established in 1900 a College Entrance Examination Board to assist them in the selection of students. In 1926, that board developed a test known as the Scholastic Aptitude Test. This is almost entirely an "objective" test (that is, the answers are given

My most memorable meal: No. 4

MAJ.-GEN. J. M. Rockingham

tells about



The day I dined on "jackeroo" stew

At seventeen, having just left school, I found myself as a "jackeroo" in Western Australia. A jackeroo is a young man learning to run a sheep or mixed station in Australia. He gets practically no pay but lives with the family instead of with the rest of the hired hands.

At the time of this tale, some six weeks after arriving for my first experience of farming, I was to break up and seed six hundred and forty acres of sand plain, eighteen miles from the nearest neighbor. I was to do it with a team of twelve horses, and supplied only with bully beef, dehydrated vegetables, bread and jam at monthly periods.

The first day was spent in digging for water which I struck at seven feet, but the flow was so slow that it took about two hours to slake the thirst of the horses. Watering, feeding, grooming and harnessing all the horses three times a day left little time for the preparation of food and so my meals were few and far between and consisted of bully beef and tea.

After several weeks of this eating routine I decided to set rabbit traps around the perimeter of my camp fire. At first the rabbits were wary, but one night I was startled out of a fitful sleep by the snap of a trap closing, followed closely by

another. I leaped out of bed and found two rabbits in the traps. By the time I had inexpertly skinned them it was time to start to get the horses ready for the day's work, and too late for breakfast.

A fairly big kangaroo fell prey to my rifle toward the end of the day. That night I put the rabbits in a stew pot with some dehydrated vegetables, ate some bully beef and worked on skinning the kangaroo until I was too sleepy to do more.

No time for breakfast or lunch the next day.

The following night saw the kangaroo skinning finished, most of the meat was in the stew pot and I threw the rabbits in as well. In the morning as I was starting to get the horses ready and had my stew cooking, I heard the most infernal noise nearby and rushed over to find a parakeet, locally known as a "twenty-eight" because of its cry, in the trap. It was dead by the time I reached it, so I plucked it and put it in the stew too, along with a few more handfuls of dehydrated onions, potatoes and carrots.

No time for breakfast again!

Thus, over three days, was prepared the most memorable meal of my life, which I ate with a circle of rabbits sitting in the firelight watching me. ★

GEN. J. M. ROCKINGHAM COMMANDS THE FIRST CANADIAN DIVISION.

by circling words or numbering sentences, and the papers can be marked mechanically). The universities that recognize this test usually base their admissions on the test scores along with a statement of the candidate's school record and a report from his principal.

To me there is something repellent about objective tests; they are mechanical and impersonal and smack of mass production; the individual pupil seems to have been fed into a calculating machine and reduced to a statistic. Yet it is the overwhelming testimony of eminent American educators that the Scholastic Aptitude Test provides a better index of a student's capacity for higher education than the familiar essay type of examination.

We should not adopt American practices uncritically. Our Canadian educational tradition, while receptive to North American developments, has been greatly influenced by our parent cultures of Great Britain and France, and those trans-Atlantic influences are not the least valuable part of our inheritance. On the other hand, we must give weight to the testimony of wise and experienced American educators. We should be ready to try any method that will bring to the universities those who really can profit from a university course.

In Alberta and in Ontario, surveys of high-school students are being carried on in an attempt to arrive at a better method of selection. In the Ontario survey (which is financed by a grant from the Atkinson Charitable Foundation) various tests, including the Scholastic Aptitude Test, will be given to students in their final year in high school, and comprehensive follow-up studies will be made during the next two years of all the students tested—those who go to college and those who do not. By this means it is hoped to find out how many students of university calibre do not go on with their education; what considerations prevent them from doing so; what factors make for success in university courses; and whether the Scholastic Aptitude Test and other tests have validity in predicting success in higher education. Whether the survey will actually find out these things remains to be seen. Perhaps the tests will be found to add little or nothing to the results of the Grade XIII examinations. But if the tests prove to have predictive validity, I believe that we should use them as an adjunct to the Grade XIII examinations, and base our admission policy on a combination of both, along with reports from the high-school principals.

I do not advocate the abolition of departmental examinations. The familiar essay-type examination compels the student to organize his material, to marshal his facts, and to express himself clearly and coherently—abilities that are useful to everyone whether he goes on to university or not. In addition to examination results, universities should receive from the applicant's secondary school a statement of his record and a report on his industry and reliability, a report that would reveal any special circumstances (such as heavy responsibilities at home or illness) that should be taken into consideration in assessing his application.

Selection of university students is not synonymous with exclusion. Examinations function as a screen; that is, they keep out the students who get lower marks than those required for entrance to universities. If the Scholastic Aptitude Test or some other test were validated and administered to all high-school students, it could function not only as a better screen, but also as a net to draw in the capable youth who have the urge and the brains but not the cash, and strengthen

our hand in our appeals for financial assistance for them. They should go to college—even if we have to pay a great deal of money for their tuition and transportation and living expenses, and even if, at the same time, we have to exclude those who cannot, or will not, do college work.

The cost of adequate scholarships will be considerable. The cost of expanding university facilities to take care of larger numbers will be enormous. (A university, as President Gilmour of McMaster University said not long ago, is the type of

business that operates at a loss to itself, though it produces a gain for everyone else.) Moreover, no single university can expand beyond a certain point without damaging its academic effectiveness, and thereby cheating the citizens and students who believe they are paying for sound education. Therefore there must be, for each section of the country, a plan for higher education that will preserve the integrity of the existing institutions.

We are not accustomed to astronomical figures in connection with higher education. But there is no better investment on

the financial page of any paper than our investment in youth. Young men and women are worth more than all our mines and forests. They are more crucial to the country than all our communications networks. They are more worth developing than the St. Lawrence Seaway. They have more potential power than Niagara, Kitimat and Chalk River. They must rely on us for the present, but we must rely on them for the future. We must develop their powers to the full, for their own sake and for the sake of Canada and the world in which we live. ★

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Merrill studies the day's entries for the horses in claiming races. He carries his "office" in his pocket.



Merrill pays his grooms from a fat roll he carries. He refused a \$50,000-a-year job to be his own boss.



Merrill dresses like a winner too. Even his flashy race-track pals chide him about his rich wardrobe.

Here's the life Frank Merrill chose to recover from TB—and the bonanza it brought him

Frank Merrill's winning way with horses

Continued from page 27

Earmarked turned out to be quite a horse. Merrill sent him to the post fourteen times. He won nine races, was second twice and third once, and earned purses worth \$14,045. At the close of the Ontario season last fall, Merrill sold Earmarked to a Toronto owner and trainer named Art Halliwell for five thousand dollars, clearly illustrating that his patience had paid off. He'd got a return of \$19,045 on a horse for which he'd paid fifteen hundred.

Gains of this magnitude are rare but Merrill seldom trains a horse that doesn't eventually turn a profit, and he's long on patience. Each time he buys a horse he gives it a complete examination. Sometimes he'll find that a horse with a size five foot has been wearing a size four shoe, or he'll find that the teeth have grown sharp and need to be filed. He files them himself with an eighteen-inch instrument called a float which has a two-inch file at one end and a handle at the other. For this operation Merrill takes off his coat, steps into the stall and while a groom holds the horse by a leather shank Merrill goes to work on the teeth. He puts a harness affair over the horse's head which forces its mouth open and keeps it that way, and then squirts a warm-water syringe into its mouth to cleanse it. Then he places one hand on the horse's nose to provide leverage and with the other hand he begins to file the teeth. If the horse's long tongue interferes, why Frankie just wraps a hand around it, hauls it out of the way and goes right on filing. Once in a while he'll put his hand into the horse's mouth up to the elbow to see how he's progressing, and often he cuts his hand on the razor-sharp teeth.

"No wonder he can't run," Merrill will say, filing away, "he's been cutting his mouth to pieces."

A horse grinds its food, doesn't chew it, and the grinding process makes the outer edges of its teeth sharp. Then it can't properly grip the bit, which slips off the sharp edges, and the jockey can't pace his mount. The bit in the horse's mouth is like the gearshift and even the engine of an automobile in a driver's hands.

"Buyin' a horse is like buyin' a used

car," Merrill says. "If it's got a cracked crankcase they ain't gonna tell you. You buy 'em and then when you're trainin' 'em you find out if there's something wrong."

Merrill gives the same careful scrutiny to horses he claims. The process of claiming, at which he has proved a master, is a system designed to keep horses in their proper classification. For example, if a man has a horse worth, say, five thousand dollars he could obviously win far more than his share of purses if he entered him in races against horses worth only two thousand dollars. To prevent this, all horses entered in a claiming race can be bought, or claimed, for a stipulated price, depending on the class of horse, by any other owner in the same race meeting. The risk of losing a valued horse keeps owners from entering it in races against horses of lower value.

But if an owner has gambling instincts, he might "drop the horse down," meaning he'll risk the claim in the hope of winning a race. It is here that Merrill's reputation as a doctor of cripples has helped him win innumerable purses; fearful that a once-expensive horse might not be sound, other owners shy away from a Merrill entry even in a cheap claiming race. Then, after the horse has won a race or two and is still running cheap, chagrined owners sometimes step in and claim it from Merrill, often to their sorrow.

Last year Merrill bought a horse named Press at Belmont in New York for two thousand dollars. Press had a bad foot, which responded to treatment, and won just under three thousand dollars for Merrill before the season closed last fall. This spring at Toronto's Old Woodbine he won three more races in twenty-five-hundred-dollar claiming events. In this third winning effort, Press was claimed by trainer Art Monaghan for the twenty-five hundred, and in his first start in his new silks he was charging down the back stretch when suddenly he went lame and was pulled up by his jockey. Examination proved the horse had broken down, meaning that he'd developed serious leg trouble. Two months later he still had not run again. Thus Merrill, who'd won about five thousand dollars in purses with Press, got a return of seventy-five hun-

dred on a horse he'd bought for less than a third of that amount.

"Those sore-legged horses," Merrill commented, "you can't run 'em the day you work 'em. You gotta take it easy. I guess that's what happened to Press."

Merrill's been bitten, too, but he often turns apparent adversity into profit. He saw a horse named Hickory Hill at Tropical Park in Florida more than a year ago which was apparently running sound. Merrill put up a pretty lavish twelve thousand dollars on behalf of Toronto owner Sol Rotenberg when Hickory Hill was entered in an expensive claiming race, but the first time out for his new owner the horse pulled up lame. Merrill examined him and found the horse had a broken bone in its foot, and he apparently had a twelve-thousand-dollar lemon on his hands.

A "lemon" turns winner

But here again Merrill's close attention to details turned a loser into a winner. Ordinarily a horse of Hickory Hill's class would have been retired to the stud in such circumstances but Merrill is not in the horse-breeding business. He buys horses to make them win so he can collect his ten percent. Thus, with Hickory Hill he had to go to work. He had a veterinarian remove the nerve from the right front leg just above the ankle, and then Merrill himself put a plaster-of-Paris cast on the leg from the knee to the ball of the foot. The cast was left on for seven weeks and when it was removed Merrill put a special bar-plate shoe on Hickory Hill's foot. This was to prevent the horse's hoof from spreading when he stepped on it, the bar extending from one side of the foot to the other and thereby keeping it taut. He put the horse into light training, gradually worked him into condition. By mid-season last year Hickory Hill had become the top handicap horse on Ontario tracks and a tremendous favorite with the customers. He got to the races twenty-six times and was out of the money only eight times. He won eleven races, some of them top stakes events, set track records at Woodbine for a mile and a sixteenth, and then a mile and an eighth, and wound up the season with \$48,885 in purses.

This spring in training, Hickory Hill broke a little bone in his left foot and Merrill had to start the whole process over again. By July he still hadn't got the horse back to the races but this didn't faze Merrill, who remarked recently

when asked about the horse, "Hickory Hill? He's got broken bones in both front feet. He'll win."

The care he lavishes on a cripple is apt to be misleading, for Merrill is no sentimentalist. With him, horse training is a business, and the turnover at his stable might run as high as a hundred horses a year, with seldom more than thirty in his stalls at any given time. If the horses he's training for other owners aren't producing he suggests pointedly to them that they might do better with another trainer. If his own horses are too unhealthy to be useful and apparently can't be made well, he feels no compunction about sending them to "the pot," the place where old and hopelessly broken-down horses are destroyed.

He is constantly on the lookout for ailing horses he feels he can treat, and makes frequent trips to New York tracks to try to buy cheaply any good horses that have "gone wrong." His interest in a sick horse is solely in making it a winning horse, and he has discovered that the surest way of accomplishing this objective is to give a sick horse the very best of care.

There is reason to believe that there is an analogy between Merrill's own illness and the manner in which he handles ailing horses. He once remarked while speaking of the two years he spent in a sanitarium that he'd been struck by the impersonal professionalism of the doctors. "They do the best they can for you," he remarked, "but they don't take it home at night."

And like the doctors he observed, Merrill has little time from dawn till dusk for anything else but his business. He's there every morning, including Sundays, by seven o'clock, keeping a careful watch over his charges. He has seven grooms helping him keep his horses fit, each in charge of four or five horses. Every night they put a mudpack concoction of Merrill's on the horses' legs from knee to ankle and then wrap the legs in soft bandages. That cools them, tightens them and keeps them fit, he feels, and each day he checks his grooms on each horse's condition.

Around his stables the thirty-eight-year-old Merrill is an easy-going, handsome figure, slim, almost gaunt, so that he looks taller than his five-foot-ten. He is an elegant though casual dresser, draping his sparse one hundred and forty-five pounds in Florida-made summer suits and sports shirts with a buttoned collar and rarely a tie. He's kidded a lot about his



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dapper appearance by other horsemen, and he banters with them good-naturedly.

"Hey, Frankie!" someone will call to him. "What's that you're wearin' today?"

"That's Italian silk," he'll grin, elaborately surveying the material's shiny finish, "but they don't sell 'em in Italy. I get 'em custom-made outta the catalogue."

He talks the profane, ungrammatical language of the race tracks, whistles tunelessly, and has a word or two for every horse as he strolls past the stalls.

"They call this one Game Sam," he'll

say, rubbing his hand down the horse's long nose, "but it's a wrong name. He's chicken." He'll look back at the horse. "Whaddayuh say, Sammy boy, what happened?"

Merrill's features are ruggedly handsome, with a cleft chin, olive complexion, blue eyes and dark curling hair. His nose has a bump on the bridge where it was broken in a fall from a horse.

"I had it bobbed; you like it better?" he'll ask. "They used to call me Banana-Nose, or Arcaro, but when I bust it the guy asked me did I want him to bob it,

so I said sure, go ahead and bob it. Pretty nifty, huh?"

He has an easy word for everyone. "Hi yuh, pardner," he'll say with a slow smile to a groom or a swipe or a boy walking hots, "what happened?" For this reason, everyone around a race track seems to like Merrill and, because of his record, they respect his ability.

"One thing about Frankie," a groom remarked one morning as he rubbed a horse with a cloth, "he never went high-hat. Leadin' trainer on the continent and he still knows everybody."

Johnny Starr, a fellow trainer whose horse Ace Marine won the Queen's Plate in 1955, says Merrill has succeeded because "he's conscientious, never overlooks a detail, is smart, and he'll do anything touchy that has to be done himself."

Once, examining a horse, Merrill discovered that two small knee bones were broken. He injected an anaesthetic into the horse's leg and calmly removed the tiny fragments himself. He was asked recently why he hadn't called the track veterinarian.

"Why call the vet?" he asked in some surprise. "By the time he'd get here I'd have it done."

Merrill says he has a way with horses. "I don't know what it is," he explains, "they seem to like me. I go into a stall where a horse is raisin' hell with the grooms, kickin' and actin' real mean, and they just seem to settle down. It's like some people with dogs, I guess. Dogs snarl at some people, and nuzzle up to others."

As long as he can remember he's liked horses. "When I was seven or eight or so, I used to crop hay for a farmer after school and all day Saturday just so I could ride the horses to the barn at night," he recalls.

In his youth, in which things were not handed to him on a platter, he was devoutly religious, too. He went to St. Basil's Church in Brantford seven days a week. "It fascinated me," he recalls. "I used to think it made me clean and pure."

He worked with horses as a youngster. His uncle, F. W. (Fred) Merrill, who still owns and trains horses, had a farm near Brantford, Ont., where Frankie worked as a kid. Frank was born Jan. 14, 1918, at Brantford. His father owned three fruit stores there, a business that went to pieces during the Depression. The family is of Italian descent; sixty years ago Frank's grandfather settled in London, Ont., where he became a baker and changed his name from Marcello to Merrill.

"I wish he'd left it," Frank says now. "I like the sound of Marcello. It's got melody."

Frank has two brothers, Rudolph Val-



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Check your answer below.



"It was quite a beginning," says Merrill. "I had three horses, no money and my wife was pregnant"

entino Merrill and Richard Bernadino Merrill. Frank has no middle name, though his stable is registered under the name of Frank H. Merrill Jr.

"I just threw that 'H' in," he grins. "I thought it looked classy. I guess it stands for Henry." He pauses, then adds, "Yah, Henry, that's it. Henry is a good-sounding name."

The Jr. is something of an afterthought, too, although his father's name is Frank. "It looks better with a junior," he says. "Frank H. Merrill Jr.—that looks pretty good. Besides, people kept gettin' me mixed up with my uncle Fred. You couldn't have two F. Merrills around the track."

Frank left school when he was thirteen to work for a dollar-fifty a day in the tobacco fields around Delhi and Simcoe near Lake Erie. "I never liked school," he recalls, "I wanted to get out into the world. I was always ambitious." When the tobacco crop had been harvested his Uncle Fred took him on his farm. He walked horses, rubbed them and galloped them for nine dollars a week. His uncle owned a beauty parlor, too, and Frank worked there in the winter, cleaning up the place and even learning to cut women's hair."

"I still cut my wife's and my daughter's," he says. "I got real good at cuttin' hair. One year round the track I cut everybody's hair, the swipes and the grooms and anybody who wanted to sit still."

When he was twenty, after six years with his uncle, Merrill realized he wasn't getting anywhere. He'd hoped to be a jockey, but he'd grown too heavy. He left, went to Toronto and started looking for work. That was 1938, during the Depression, and Merrill recalls that he lived outdoors, sleeping under the Don Bridge. "I ate nuthin' but baloney and bread," he says. "Baloney was fifteen cents a pound and bread a nickel a loaf. I slept under old newspapers and, you know, they ain't bad; they break the wind and they're pretty warm."

He couldn't make a go of it and rejoined his uncle. Fred Merrill had a horse named Be Thankful that was doing him no good, and he had decided to have it destroyed. Frank prevailed upon his uncle to let him have it. "If you give him to me I'll feed him what the other horses leave," Frank pleaded, and his uncle finally relented.

"That was the kindest horse I've ever known," he remembers. "He was like a dog, so gentle. I used to sleep with that horse."

He would take him to Lake Ontario when his uncle was running horses in Toronto, and ride him into the water where the horse swam. "I figured it might strengthen his legs," says Merrill. But Be Thankful never won a race for him. "Best he ever did, he lose a picture," Frank says, meaning the horse was beaten in a photo finish.

In 1940 Merrill married Grace Dowdy, a girl he'd met in Toronto. He went to work at Holly Products, manufacturing sun helmets for the army. He worked thirteen hours a night, from 6 p.m. until 7 a.m., fitting cloth to the helmets.

"I did thirteen hundred hats a night and that's how I got TB," he says. "One spring morning I threw a hemorrhage, and that was that."

He was in the Brantford Sanitarium for two years, from 1941 to 1943. "They kept sticking needles in me, and then they wanted to take the ribs out, two at a time, for a permanent collapse of the

lung. I said no. One doc said I'd never leave the joint unless they collapsed the lung permanently, and I said okay, so I'll be stayin' but you're not takin' my ribs."

In 1943 when he was released he headed for the track, determined never again to work indoors. He was given three horses on the cuff—meaning that if they won any purses he'd pay for them; if

they didn't he wasn't required to. This is not an uncommon practice around a race track where owners occasionally give someone who's down in his luck a chance to work with unnotable horses on a sort of pay-me-if-you-get-it basis. John Thorpe, trainer for the Seagram stable, gave him two horses, one named Trevillian, and Arthur Brent, another trainer, gave him Best Dressed. He took the three

to Montreal to race at Blue Bonnets.

"It was quite a beginning," Merrill says. "I had three horses, no money and my wife was pregnant. I never used to eat so that she could eat. I never did have breakfast in Montreal."

But suddenly that began to change when Trevillian won a race. Then he won another. In seven months, the horse won nine races. Merrill paid back the trainers

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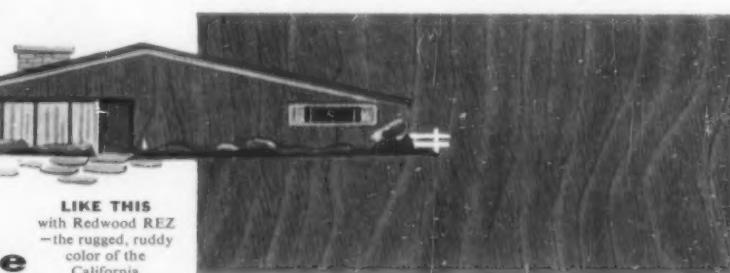
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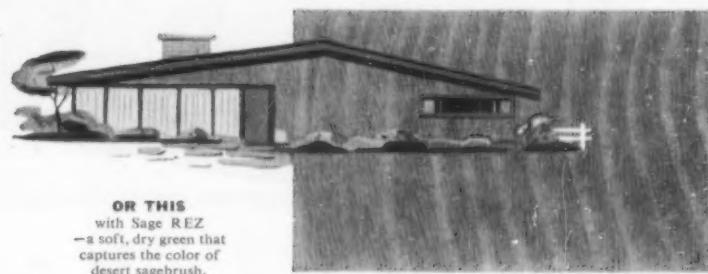
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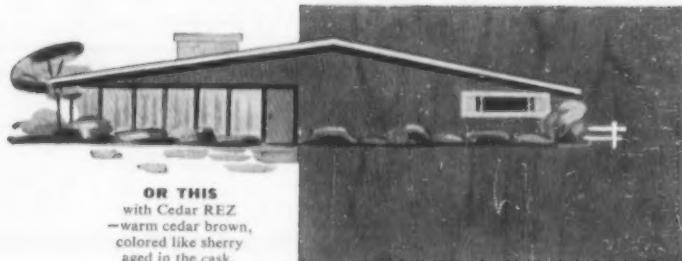
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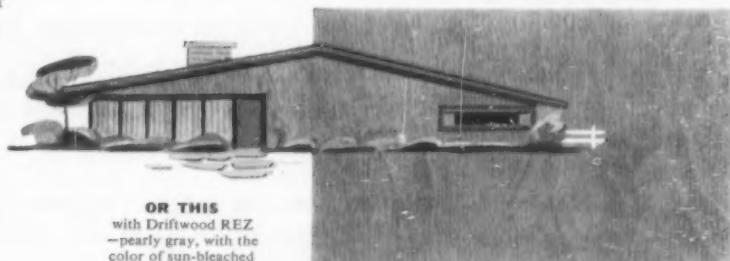
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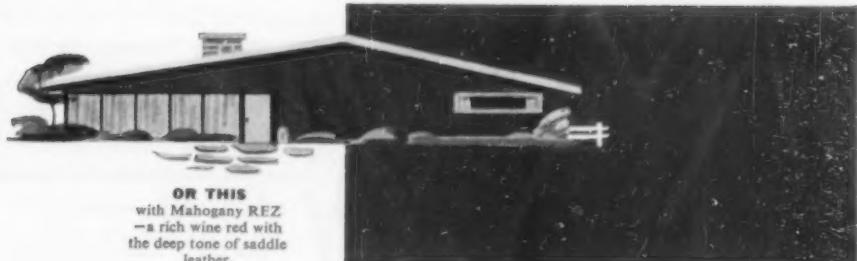
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Rexall

who'd given him the horses on the cuff, picked up a few more horses from a Montreal horseman named Dave Zako, and went with them to Detroit, then Chicago and Louisville and Miami, always doing well enough to get by and gradually building up his stable as owners began turning over horses to him to train. By 1950 he was one of Canada's three leading trainers, culminating his rise in 1954 when he led all Canadian trainers with ninety-two winners, which gave him a tie for sixth place on the continent.

In those years as he was growing more

successful Merrill lived high off the hog, and money didn't have much meaning to him. He wasn't averse to taking a few drinks, and then a few more, and he tossed money into the pari-mutuel machines as if he knew the man who made it. Once, at Thorncliffe Park in Toronto, he lined up in front of the ten-dollar window with a fistful of money and told the man to start punching win tickets on a horse called Beau Dandy until Merrill told him to stop. The man punched out two hundred and sixty ten-dollar tickets. One thing about it, Beau Dandy won. He

paid five-sixty for two, and Merrill went away with seventy-two hundred and eighty dollars.

"I lost it almost as fast," he says now. "One morning three years ago I realized I was being a fool, drinkin',bettin', and so on. I wouldn't let a horse of mine have the way I was behavin'. I cut it out. I haven't had three drinks in three years and I never made another bet. It's like they say, you can beat one race but you can't beat the races."

Nowadays Merrill occasionally picks up money from bets, but he never lays

a wager. People are constantly crowding around him at a race track, asking for information. Will this horse win? Will that horse win? Has this one got a chance? Merrill tells everyone who asks him, from the cop on the paddock gate to the women wearing mink on the clubhouse lawn, what he thinks. Sometimes they buy a ticket for him with their money and if the horse comes down they give Merrill the ticket.

"I don't let people bet for me who can't afford it," he says. "If a guy's a millionaire, well, it's his bankroll."

Privately, he wishes people would stop bothering him. "Half the time I don't know any more than they do," he says. "I know my horse is in good condition and I hope he wins, but that doesn't mean much. Other trainers have their horses in shape, too. We all want to win to get our ten percent of the purse."

But he can't brush past the bettors. "They'd think I'd gone big-headed, bein' leadin' trainer and all. I tell 'em what I think, but, look, if a trainer wins one race in every three starts, that's a terrific average. And even that means he's wrong two outta three times."

Thus, when Merrill's watching the races through his binoculars these days he's not watching a bet; actually, he's watching the horses that are trailing the field, trying to discover why they're losing, trying to decide if he claimed the horse whether he could win with it. The biggest thrill he gets out of racing, he says, is to watch an apparent cripple respond to his treatment and win a race.

He illustrated this just last April when he turned his back on a fifty-thousand-dollar-a-year contract as trainer for Mrs. Elizabeth Graham, owner of the Maine Chance Farm in the United States and founder of the Elizabeth Arden cosmetic firm. He actually took over the job as top trainer for her rich stable in Florida in January, but he declined to sign a contract. Mrs. Graham has a reputation in racing for turning over trainers faster than the names of lipsticks change. Merrill kept the job for three months and then resigned.

"She wants to be her own trainer," he explains. "What she really wants is a yes-man, not a trainer. She's a very generous woman, but it's impossible to train for her if you have a mind of your own."

She'd bring a butter-colored cosmetic cream to the stable—"an eight-hour mudpack like women put on their faces," Merrill relates—and insist that it be rubbed on the horses.

"Fifty Gs is a lot of dough," Merrill says in explaining why he left, "but I'm no yes-man."

"Besides," he adds, "all those Maine Chance horses are sound."

Thus the man who started with three horses on the cuff has gone to the very top in his business; to the point, indeed, where he now occasionally turns over horses to young trainers down in their luck. "Guys are buggin' me all the time to give them the ones that I figure should be destroyed," he says, "but I won't give that kind away. I figure I'm doin' the horse a favor when I send him to the pot. At least he's dead and not bein' abused. If you had a pet dog and he got sick, it's better to destroy him than give him to somebody who'd just hurt him. Besides, race horses aren't happy unless they're doin' what they want to do—run." ★



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Why we're getting more disastrous hurricanes

continued from page 22

Over a still tropical sea a vicious circle is set in motion—and another hurricane is born

way water spirals as it drains from a wash bowl.

Low-pressure zones are produced by disturbances along fronts where cold- and warm-air masses are colliding, or by uneven distribution of the sun's heat which has created a pocket of warm rising air. This structure, consisting of a central low with its doughnut of wind spiraling around, may be anywhere from a thousand miles or more across to as little as fifty yards. The big ones are our normal storms which march in a steady procession from west to east around the northern hemisphere, bringing our day-to-day changes in weather. As a rule, the smaller and more compressed they are, the more violent is the wind.

Among normal storms, it is a severe one that can produce a wind of fifty miles an hour. But when the whole structure is compressed so that its diameter is a quarter of a mile or less, as sometimes happens, winds may hit three hundred miles an hour, and the result is a tornado that levels everything in its path. Hurricanes fit between these two extremes. (The term "cyclone," often used erroneously for a severe windstorm, is a general family name for all revolving storms that have low pressures at their centres.)

Violence in a vacuum

Hurricanes, although their winds are not of tornado violence, are the most destructive storms. This is because tornadoes live only an hour or so and cover a very narrow path, whereas hurricanes live for a week or two and cut a swath of destruction one to five hundred miles wide, often spawning a rash of tornadoes along their fringes. Hurricane winds commonly reach one hundred and twenty-five miles an hour, though they are usually reduced to from seventy to ninety miles an hour before they reach Canada. They are further characterized by extreme humidity and torrential rains because of the water vapor sucked up while passing over tropical seas.

As for what causes hurricanes, the weather scientists are not too sure, because the big storms are always born at sea where there are no meteorologists or instruments to observe and record the details. But this is apparently what happens:

In a narrow belt near the equator, air lying on the sea is often heated unevenly by the sun and, wherever a small patch of it becomes slightly warmer than the surrounding air, it begins to rise. In rising it rotates like the little whirlwinds or "dust devils" frequently seen spinning down country roads on hot summer afternoons, sucking up dust and debris as they go. The rising air has actually created a small column of low pressure, and the air spinning around it is moving in to "fill up" this miniature low. When conditions are right, thousands of these vortexes are being produced over hot tropical seas. Most live for only a few seconds or minutes before the pressure is equalized and the low disappears.

But apparently at extremely rare intervals one of these trivial vortexes becomes self-perpetuating. Meteorologists believe this happens when it moves into an area where water and air are very still and the air close to the sea has become saturated with evaporated moisture. When this vapor-laden air is sucked upward, it acts like a fuel, for as it condenses it gives up

heat. This released heat makes the air column rise and condense all the faster; and the faster it rises, the faster it sucks in more vapor fuel from the sea's surface below. Once this vicious circle of circumstances is set in motion and a supply

of fuel remains available, the vortex of rising spinning air can do only one thing—keep growing in size and violence.

Many hurricanes-to-be are probably strangled at birth when they move over a cooler area of sea where the air's

vapor content is low, for at the outset the brewing storm needs constant "refueling." But once the vortex—perhaps only a foot or two across at its beginning—grows into a mature hurricane a hundred miles or so in diameter, its own momen-

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tum is then so tremendous that it must move over land or over the cold North Atlantic, permanently cutting off its source of vapor fuel, before it will finally die. But even over land severe hurricanes sometimes rage for a few days before their momentum is spent.

The "low" at a hurricane's heart is known as the "eye," a deceptively clear and quiet zone ten to twenty miles across where there is no wind because here the wind has reached its goal and is being sucked violently upward. While air spirals around the eye to produce the hurricane

wind, the entire hurricane structure is also moving *en masse*, the way a spinning top moves around the floor while continuing to spin. It drifts about slowly at ten to twenty miles an hour, but gradually speeds up to as high as fifty miles an hour.

Hurricanes that reach Canada are born near the equator, in a narrow belt stretching from the Caribbean east across the Atlantic to the vicinity of Cape Verde Islands, off Africa. From their birthplace out at sea most hurricanes follow a curving course, first west toward Florida and

the Carolinas, then finally northeast back out over the Atlantic to blow themselves out at sea. This was the traditional hurricane path, but recently more and more of them, instead of turning harmlessly to the northeast out to sea, have been following a more northerly path which has carried their devastating punch into northern U.S. and Canada.

The increase apparently began with the great New England hurricane of September 1938, which killed six hundred people and destroyed three hundred million dollars worth of property. At that time Dr.

C. F. Brooks, of Harvard University, and other meteorologists studied the average frequency of New England hurricanes prior to 1938 and worked out the odds against future repetitions. Their findings, which apply roughly to the Canadian Maritimes as well, were that from past experience New England could expect an extremely severe hurricane like the 1938 storm every one hundred and fifty years, and a hurricane of some sort every ten years.

But how have these odds held? The next severe New England hurricane came, not one hundred and fifty years later, but only six years later, in 1944. Then another, equally severe, hit New England in 1954. Lesser hurricanes, instead of reaching New England every ten years, have been coming since 1938 at the rate of about one every three years.

Statistics for Ontario suggest a similar hurricane increase. According to a recent study by A. H. Mason, of the Canadian Meteorological Service in Toronto, moderate to severe hurricanes entered Ontario at the rate of one every six or seven years during the fifty-year period 1900-1949. In the six hurricane seasons since 1949, however, Ontario has been hit by two (and a third one was a near miss), to produce an average hurricane rate of one every three years.

Eastern Canada as a whole (Ontario to Newfoundland) has been hit during the last three years by ten hurricanes, making it by far the most severe three-year period on record. They began with Hurricane Barbara in August 1953. (Meteorologists, for identification purposes, give girls' names to hurricanes, and the first letter of each name denotes the order in which the hurricane occurred that season. Barbara was 1953's second hurricane. Alice, the first one, was a weak sister that didn't get out of the Caribbean.)

Barbara romped up the Atlantic, turned west and did much damage in Cape Breton and Newfoundland. Two weeks later, Carol, a much heftier hurricane, plunged up the Bay of Fundy with eighty-mile-an-hour winds and did a million dollars damage in the Maritimes in a few hours.

Next year, 1954, three moderate hurricanes came north in quick succession, striking Quebec, Newfoundland and New Brunswick, in that order. And then came Hazel, to parlay a vicious series of tragic coincidences into the most destructive hurricane ever to hit Canada.

Hazel had a charmed life. It was born off the northern coast of South America on October 5, 1954, and zig-zagged erratically around the Caribbean for five days, displaying all the signs of a weakening that would probably die before it got far from home. On October 10 it suddenly sprinted off on a beeline north, heading directly at mountainous Haiti, where weathermen expected it to beat itself to death (mountains usually disperse and kill hurricanes). But Hazel veered, skirted Haiti, picked up new strength and dashed north toward the Carolinas.

According to the traditional rules of hurricane behavior, Hazel should have turned east and blown itself out at sea; failing this, it should have died before

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ANSWER

to Who is it? on page 38

Yousuf Karsh, photographer of Winston Churchill and other world-famous personalities.

traveling far overland; or it should have been blocked by the Allegheny Mountains and, if not killed, at least flung out into the Atlantic again. But Hazel survived all the hazards in its path and raced on across Pennsylvania, New York State and into southern Ontario.

Here came the most sinister coincidence of all. While Hazel, a vicious spawn of the tropics, plunged north, a vast mass of cold arctic air was pushing southeast across Ontario toward it. Hazel by now was a circular storm wide enough to reach from Kingston to Windsor. It raced across Lake Ontario at fifty miles an hour, its towering clouds still saturated with water it had picked up from the steaming Caribbean. On the afternoon of October 15 Hazel's most vicious centre collided with the line of cold arctic air directly over Toronto, Ontario's most densely populated region. The sudden cooling condensed Hazel's tremendous load of water vapor and Toronto was drenched in the heaviest twelve-hour rainfall in its history.

That night the floods that plunged down the Humber, Credit and Etobicoke Rivers of Toronto's suburbs swept away one hundred million dollars worth of homes and drowned eighty persons. Next day Hazel died, hidden and unobserved, somewhere in the Quebec wilderness east of Hudson Bay.

Four more hurricanes reached Canada in 1955. The last one, Ione, swept St. John's with ninety-mile-an-hour winds and caused three million dollars damage in Newfoundland.

Blow the man down

Canadians have good reason to be concerned over whether more of the meteorological monsters will continue reaching Canada, for hurricanes strike with a triple punch of waves, wind and rain.

When moving across the sea a hurricane literally pushes the water ahead of it, and storm tides may rise ten to fifteen feet above normal. Coastal areas are flooded and waves pound far inland. In 1737 on the Bay of Bengal, hurricane waves flooded vast coastal areas and are said to have drowned three hundred thousand people. Similar hurricane flooding at Galveston, Texas, in 1900 drowned six thousand.

Maximum hurricane winds are not known because invariably the wind-measuring instruments are blown away just when things begin to get most interesting. Wind velocity reports usually terminate abruptly like this one from a Florida weather station in 1948: "3.40 p.m. Wind one hundred and twenty-four miles per hour, anemometer swept away." Anemometers sensitive enough to measure light day-to-day breezes are no match for a full-fledged hurricane. The highest official recorded hurricane wind was an average of one hundred and eighty-seven miles an hour for a five-minute period during the New England hurricane of 1938. Meteorologists said that to produce this average there would have to be gusts of two hundred and fifty miles per hour or more.

Sometimes hurricanes not only blow away the instruments but the men watching them too. A log kept at a weather station in the Florida Keys during a 1935 hurricane reads like this: "10.15 p.m. Wind seems stronger, barometer 26.98 inches. The house is now breaking up . . ." Then there is a four-hour gap, and the log resumes: "2.25 a.m. I became conscious in a tree, lodged about twenty feet above ground."

Hurricane rains often cause more deaths than the wind, because of flash floods they produce in rivers. One inch of

rain in twenty-four hours is a heavy rainfall for Canada, yet Hazel dumped seven inches on the vicinity of Toronto. Even this is a trickle to what hurricanes sometimes do. The record was in 1911 in the Philippines—forty-six inches in twenty-four hours.

Hurricanes are always producing surprises, and one of the strangest occurred last year. Meteorologists have always insisted that conditions suitable for the development of hurricanes in the Caribbean and Atlantic are never present earlier than May. A January hurricane

reported by Columbus in the West Indies four hundred and fifty years ago was regarded as an imaginary one that Columbus fictionalized in his ship's log to explain damage to his ship caused by a mutinous crew. But now Columbus can rest easier in his grave. There was a January hurricane in the West Indies in 1955, and meteorologists are now forced to admit that the long-derided Columbus hurricane might really have occurred.

Meteorologists are working desperately to determine what steers hurricanes, so that hurricane movements can be fore-

casted earlier and more accurately. Why do some of the big storms spin wildly out of the tropics and lunge into Canada? The weather experts think they have the answer.

It used to be thought that the prevailing westerly winds caught the hurricanes off the Carolinas and were responsible for turning them northeast into the Atlantic. Now meteorologists suspect that the westerlies form only a small part of the steering mechanism.

According to latest theories, there may be two other factors that have played



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bigger roles in shaping this typical curving hurricane path. One of them is the jet stream, that recently discovered river of fast-moving air that circles the globe five to eight miles up; and the other is what meteorologists call the "Bermuda high."

The Bermuda high is a vast oval-shaped, semi-permanent mound of high-pressure or "hard" air which sits for long periods over the Atlantic. Its size varies but usually it extends from the latitude of Florida north to around the latitude of Newfoundland, and east and west for most of the width of the Atlantic. The jet stream, which has only begun to be understood with the recent increase in high-altitude flying, is a narrow ribbon of wind high above the earth, twenty miles or so in width, in which air is often moving at three hundred miles an hour. The jet stream passes over the United States from west to east and continues out over the Atlantic until it collides with the western rim of the Bermuda high. This high deflects the jet stream northeast and it makes a big detouring circle, turning back on its eastward path again when it gets north of the Bermuda high somewhere in the North Atlantic.

The jet that tows hurricanes

Hurricanes also are deflected by the Bermuda high, and the curving path they generally follow is determined by the location of the edges of the high. When a hurricane has curved north around the high and arrives off or over the Carolinas, it is believed that the hurricane's top story is grabbed by the jet stream's three-hundred-mile-an-hour winds, and the storm is literally dragged along by the scuff of its neck.

In the old days the point where the jet stream met the Bermuda high was usually well offshore, so that most hurricanes were dragged northeast before they reached land. Now the Bermuda high seems to be spending much more of its time sitting with its western edge close to or directly on the U.S. Atlantic coast. This means that hurricanes drift farther west before they are turned north, and this western drift is bringing more of the big tropical storms ashore. So now, when the jet stream grabs the top of a hurricane, this is much more likely to occur over the southern U.S. mainland, and then the northeast drag, instead of carrying it to sea, carries it straight up the coast through New York State, New England and into eastern Canada.

The man who has done most of the work investigating the jet stream's apparent effect on hurricane paths is Jerome Namias, the U.S. Weather Bureau's chief of long-range forecasting. Namias, in his recent thirty-day forecasts, has stuck his neck out much farther than most weathermen are willing to do, but he refuses to make any forecasts about possible future behavior of the Bermuda high, the jet stream and the hurricanes they are believed to steer.

He says merely that the edge of the high and the jet stream form an atmospheric funnel, drawing tropical air north, that the funnel's average position has shifted landward since the late 1930s and that it is probably responsible for the Atlantic coast's milder winters in recent years as well as for its increase in hurricanes. But the reason for the funnel's shift and whether it has permanently shifted are questions that have Namias and his colleagues still wondering.

Canadian weathermen are wondering too, but not with much optimism. For meanwhile they are warning eastern Canadians that there are probably more Carols and Hazels on the way. ★



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The secret war of Charles Goodeve continued from page 24

"In clouds of smoke the awesome Panjandrum thundered down the ramp and set off up the beach"

whole area would be swept by heavy fire. The problem facing DMWD was how to get one ton of high explosive to the base of the wall and set it off under these conditions.

Norway was puzzling over this one morning when a group-captain named Finch-Noyes, who was attached to the headquarters of Combined Operations, came to see him. He brought with him some rough sketches of a remarkable device. It consisted of two enormous steel wheels, each ten feet in diameter, with a tread about a foot wide. They were connected by a drumlike axle which, Finch-Noyes explained, would contain high explosive. The monster would be propelled by a large number of slow-burning cordite rockets fitted around the circumference of each wheel.

The thing would be carried to the shore in a tank-landing craft. When the ramp went down the rockets would be ignited and the monster would propel itself through the shallow water and up the beach like a giant Catherine wheel, reaching a speed of perhaps sixty miles an hour by the time it struck the concrete wall. There the steel wheels would collapse and the drum of TNT would be hurled against the foot of the wall, where a mechanical device would set off the explosive.

It was an ingenious and revolutionary conception. The more Norway studied it, the more it seemed to him that it offered the only solution to this highly difficult problem.

Norway christened the monster Panjandrum—"because the gunpowder ran out from its heels." Within a month the first model had been built in great secrecy in a special iron shed at Leytonstone. Before it could be removed from the shed, the end of the building had to be taken out. In the early hours of Sept. 2, 1943, the Panjandrum was rolled across the yard and loaded onto a transporter. The police had been alerted and, with an escort of motorcycle outriders, the monster set off for its trials in the west of England, moving only under cover of darkness.

The precautions taken by the security authorities were somewhat peculiar. They insisted that the Panjandrum must only stop at approved Admiralty depots on its journey westward, and on arrival at these places it was hurriedly locked up before curious civilians could catch a close glimpse of it. When it arrived at Appledore, however, Security abandoned all interest in it. The Panjandrum was rolled off the transporter onto the beach, where it was promptly surrounded by holiday-makers, who gazed with awe at the towering wheels, and prodded the rocket-holders inquisitively.

For its first tests the device was taken to Westward Ho! where the slope of the open beaches and the tidal conditions were almost identical to those that would be encountered on the far side of the Channel. On the morning of Sept. 7 its central explosive drum was filled with four thousand pounds of dried sand and the rockets were clamped in position. As no one was quite certain how the Panjandrum would behave only eighteen rockets were tried at the start, but even so it was an awe-inspiring sight.

Surrounded in clouds of smoke and flame the Panjandrum thundered down the ramp of the landing craft, plowed its

way through the water, and set off up the beach. It kept a relatively straight course until two of the rockets on one side failed to ignite, causing it to swing to starboard, but Norway saw it was much underpowered, and it came to a standstill after

covering two hundred and twenty yards. Without more rockets it was obvious that the Panjandrum would never reach a speed of sixty mph at the head of the beach.

Guy Williamson, who had shouldered

the difficult designing problems, decided to double the number of rockets, fitting them onto the inside of the wheels. On the following day the Panjandrum was taken around to Instow Beach. With clouds of steam hissing around it, it ne-

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gotiated one hundred and fifty yards of water quite successfully, but just before it reached the target marker on the beach a patch of uneven loose sand slowed it up. Again some rockets failed, and it swerved aside, coming to rest after four hundred yards. It was still far too slow, and more stability was obviously needed.

At a staff conference, Williamson suggested the fitting of a third wheel to make the contraption more stable and this was agreed, but when they came to discuss the rocket problem there was some difference of opinion. Norway contended that the faster the Panjandrum traveled the straighter it ought to go; another expert took the view that it should begin its run slowly and work up gradually to maximum speed. In the end it was decided to double the number of rockets once again.

On Sept. 27 a three-wheeled Panjandrum was placed on a special wooden ramp erected near the waterline at Bideford. Before they could try it out, however, a fault developed in the electrical wiring circuit and, although they worked desperately to clear this, they were overtaken by the tide. Rolling in across the bay the sea engulfed the great machine, and to Williamson's dismay the centre wheel collapsed. Some of the rockets were salvaged, but it was three weeks before the juggernaut was again ready for action.

Powered by more than seventy rockets on its third outing the Panjandrum gave a sensational display. No sooner had it reached the water's edge than it swerved violently back toward the sea, heeling over until the wheel flanges caught in the sand. It lurched and overturned, the crash dislodging several of the rockets, which flew low over the beach in all directions while others, still secured to the perimeter of the outer wheel, continued to explode under water, sending up fierce jets of steam.

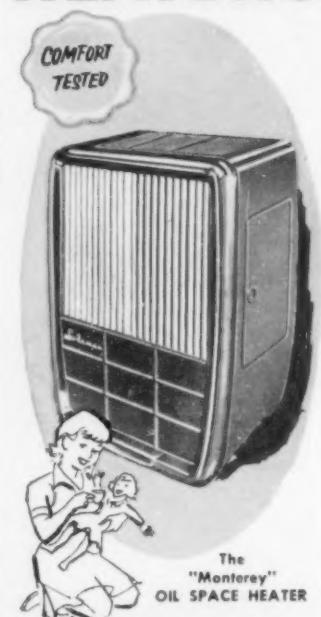
The third-wheel experiment was abandoned and a steering system was rigged up—cables controlled by naval kite-balloon winches acting as brakes on the large axle—and on Oct. 26 the monster was given its fourth trial, at Westward Ho!

Two one-ton cables, two thousand feet long, were used, and Norway and Williamson each took charge of a winch. The beach was ribbed, soft and very wet. This time the Panjandrum worked up to a tremendous speed and when Norway applied the brake to steady it, the cable on the port side snapped off close to the machine. It came whistling back like a bullet, and both the steersmen had to hurl themselves face downward on the wet sand. The working of the starboard wire showed that the steering system had possibilities, but when they tried it out again next day one of the cables snapped. Trials were therefore suspended to await a heavier wire.

With this fitted, and new winches operating, they launched the Panjandrum once more on Nov. 12. It was a fine autumn day and this time the beach was hard and smooth. A marker post was erected two hundred and fifty yards down the beach, and they tried to demolish this. In spite of a cross wind there was no difficulty in steering the Panjandrum, but the target was hidden in smoke as the machine thundered toward it. At the halfway stage one rocket burst from its clamps, and released another, but on the whole the Panjandrum gave quite a satisfactory account of itself.

Norway was still worried, however, by the stability problem. At length it dawned on him what was happening. The power needed to make it reach the desired speed against the rolling resistance

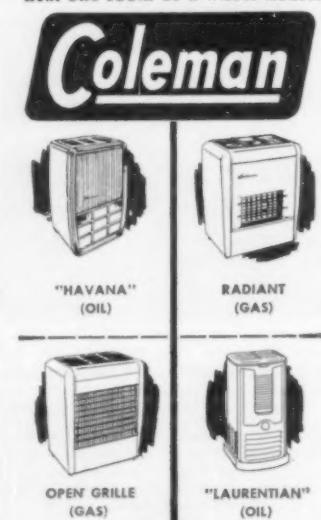
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on the sand exerted so much torque that wheel slip was developing. The steering gear showed some promise, but he felt that this would never hold the huge machine with any certainty. The real basis of directional control was the grip of the wheels on the sand, and on an uneven surface the Panjandrum might well run amok.

The Wheezers and Dodgers realized that the experiments were becoming extremely dangerous, and the hazards were increased by the erratic behavior of the rockets, which were not designed to withstand a lateral centrifugal force while burning. When the speed of the Panjandrum rose to over fifty mph it was common for one or two rockets to burst. This usually destroyed the attachment of adjacent rockets, which began darting all over the beach. These rockets were formidable pieces of ironmongery, each weighing about twenty pounds and burning for forty seconds with a thrust of forty pounds. When one broke away from the side of the Panjandrum it would scream across the sand in a series of hops at a height of only two or three feet, its progress lasting half a minute or more.

A trial run was a thing that had to be seen to be believed: the Panjandrum, a hurtling mass of smoke and flame, often careered straight for the spectators, or at the movie operator filming its progress who usually thought he had chosen a safe position, while rockets that had burst free from the wheels flew in all directions. The hazards, however, had to be accepted.

Temperament at Westward Ho!

On the afternoon of the same day—Nov. 12—they decided to test the monster over a chain of small craters, three rows of mines being detonated to make them. The Panjandrum traveled at a higher speed than ever before, and right from the start the steering became erratic. The machine took a sinuous path, with violent swings at each touch of the brake, and after covering one hundred and forty yards it lurched wildly to port.

Norway threw up his hands to release all the burden from the steering apparatus, and this caused an instant over-run which locked both winch wires. The Panjandrum pivoted toward the sea and came to a halt. They found that this last fierce turn had badly distorted the starboard wheel.

The DMWD team returned to their hotel thoroughly dejected. The Panjandrum was quite unpredictable, and there seemed to be no end to its fits of temperament. Talking things over they decided that the new band brakes were too powerful, even if controlled with a light touch. A new type of brake must be designed. If, too, an angle was introduced on the steel tires this might give the machine a firmer grip on the sand.

No more trials took place before the end of the year. Various modifications were made, and two new Panjandrums were built in London. While they were being made ready word came to DMWD that close accuracy of steering was no longer considered imperative by the invasion planners.

When they next assembled at Westward Ho!, early in January 1944, the Panjandrum that they loaded onto the landing craft was almost a reversion to the original prototype in appearance, with just the two ten-foot wheels, the axle chamber (ballasted with two tons of sand) and no steering gear fitted. In the morning the Panjandrum was given

This is the story of an actual Canadian family insured by The Travelers; to safeguard its privacy, different names and pictures have been used.



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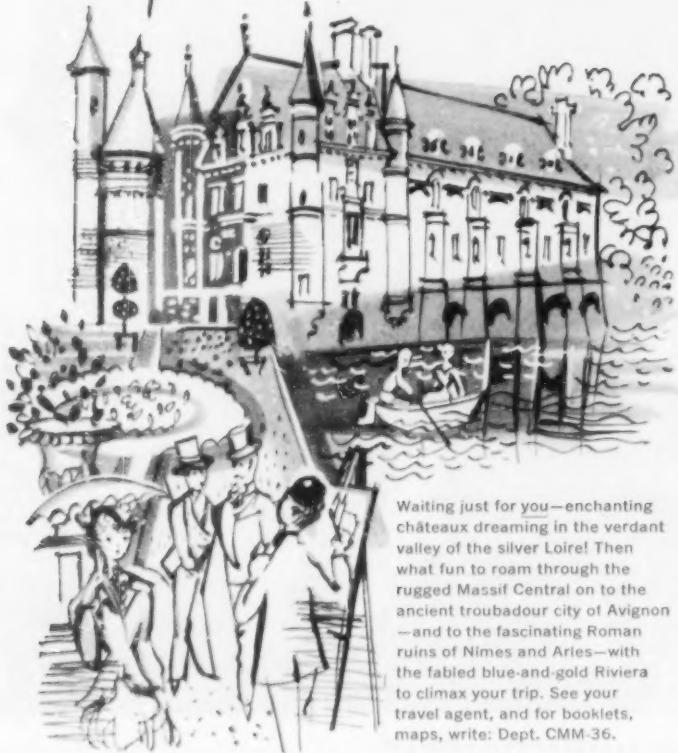
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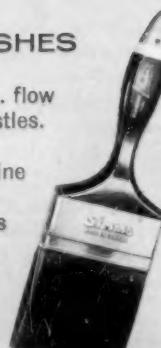


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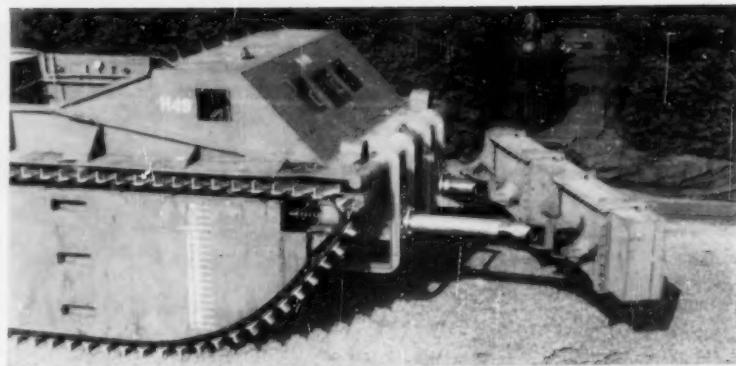
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The Alligator with the explosive nose

Remote-controlled from a plane, this amazing amphibian could swim ashore and blow a hole in defensive walls or pillboxes with the explosives in its self-adjusting ram.

a preliminary run with forty-eight rockets in position.

After lunch a resplendent gathering of admirals, generals and scientific observers made their way to the pebble ridge that ran along the beach. Whitehall had come to pass judgment on the Panjandrum, and the Wheezers and Dodgers sensed that this trial would decide its fate.

First, two minefields were detonated to provide the craters that would be encountered on an enemy beach. The photographer who was to cover the run chose a position about halfway up the course. As he got his movie equipment ready he was joined by several brass hats, and an Airedale dog.

Far down the beach lay the LCT. Through binoculars the watchers could see the Panjandrum being brought to the head of the ramp. Then the firing signal was given and the Panjandrum was on its way.

It made a slow, impressive start. In the first few yards the inevitable rocket burst from its clamps. Two more broke free, but now the Panjandrum was moving at a terrific speed. To the photographer it seemed to be nearing one hundred miles an hour — a rushing inferno of smoke and fierce jets of fire.

At eighty yards the monster crossed one line of craters, and the shore-side wheel dipped ominously. At one hundred and twenty yards the awed watchers realized it was out of control. The Panjandrum began to swing in a great curve to starboard. Hypnotized by the vast Frankenstein object roaring across the sand, the photographer continued to cover it until it was heading straight for him. Then he sprang to his feet and ran for his life, following the VIPs as they flung themselves headlong down the far side of the pebble ridge into a mass of barbed wire. At any moment they expected the monster to come hurtling over the brow and crush them all to death. But the seconds passed, and nothing happened. So they crawled back up the stony slope. From the crest of the ridge they saw an amazing sight.

The Panjandrum was in its death throes. It had swung back toward the sea and crashed over on its side on the sand. This smothered the rockets that were underneath, but the others continued to explode, wrenching and distorting the whole frame until the remainder burst from their fittings and screamed off along the beach in every direction, some vainly pursued by the Airedale.

When the pyrotechnics were over and the awe-struck admirals, generals and scientists descended cautiously to the beach, all that remained of the Panjandrum was a twisted and blackened mass of wreckage. Around it lapped the incoming tide. The Panjandrum was dead.

The official reason for the Panjandrum experiments may never be told. Even today there is still some mystery about it, for the Atlantic Wall, which it was called into being to demolish, never in fact existed in the form outlined to DMWD. The beaches ultimately assaulted by the Allies in Normandy had no defense of this kind, and the proposal may well have been launched in the hope that it would leak out to the enemy, thus convincing them that the Allies intended to attack that part of the coast where such walls had already been built.

The work of Goodeve's Wheezers and Dodgers was, however, turned to good account. It stimulated and advanced research on a much more tractable engine of war—the Alligator.

This was an amphibious vehicle, originally designed for rescue work in the Everglades of Florida. It had tracks like a tank and on these were little scoop-like spades which propelled it slowly through the water. The DMWD now proposed to mount on the bows of this amphibian a "mattress" containing a ton of high explosive. This would be held by two compressed air jacks, which would press firmly against a wall or any other type of obstruction it encountered.

Guy Williamson designed the high-explosive mattress and the supporting jacks; others tackled the intricate electrical problems and the radio-control gear which was to guide the Alligator from



The floating airstrip two men can assemble

The inventive genius of Englishman Ronald Hamilton produced Lily, an airport on the sea supported by flexible buoyancy cans. Here, an Auster aircraft takes off.

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Sir Alexander Mackenzie
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THIS IS INDEED
A FINE COUNTRY!

WE WILL HEAD NORTH
ON SLAVE RIVER

SOON WE MUST PASS
OVERLAND TO THE SOUTH

In 1787, Mackenzie, an ambitious 23-year-old Scot, built a fur trading post at Fort Chipewyan on Lake Athabasca.

Seeking a new route to the Arctic, he left Chipewyan in June, 1789. At Whale Islands his guide failed. Mackenzie turned home.

Undaunted, Mackenzie dreamt of opening new territory—right to the western sea. In May 1793 he set out again.

THIS ROCK SHALL MARK
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ALEXANDER MACKENZIE
BY LAND FROM CANADA
THE 22nd OF JULY 1793

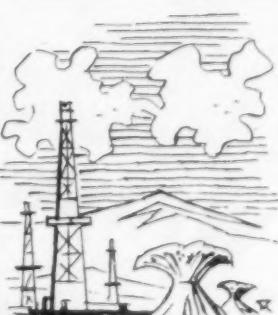
Rising above his ill-health and setbacks, Mackenzie and his men finally reached the Pacific coast on July 22nd, 1793. There, for Canada, he carved his name on a rock. They had won through!

MAY GOD LET THIS BOOK HELP CANADA

Travelling companion to Edward, Duke of Kent, on his Canadian tour, Mackenzie in 1801, published the results of his explorations. Soon others followed where he had led. Daily new settlers moved in.

"HERE MY VOYAGES OF
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Writer, administrator, explorer, builder, Mackenzie gave his health... his whole life... to opening up the Canada we know today.



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its landing craft to the enemy shore. In quite a short time an automaton even more ingenious than the ill-starred Panjandrum began to take shape.

When it was ready the hydraulic system was tested against a ten-foot wall. The explosive mattress was slung on two pivots attached to the outboard end of a pair of huge hydraulic rams. These rams were linked in such a way that if the Alligator hit an obstruction at an angle the ram taking the first impact would be forced inward, breaking a copper seal. This would bring into play the

ram not in contact, and it would shoot out, forcing the other corner of the mattress into position. The pivots allowed the load of explosive to turn upward or downward, according to the slope of the target, and the actual detonation of the charge was effected by mine detectors fixed on the front of the mattress.

The first trial went well. Williamson had been repeatedly reminded by the ballistic experts that the mattress must press tightly against the target; to his delight the hydraulic rams exerted such pressure that the whole vehicle, which weighed

eleven tons, was pushed slowly backward.

Next, the radio-control apparatus was installed and, borrowing two tons of weights, they carried out loading trials to test the Alligator's stability in the water. At Westward Ho! some brilliant work on the electrics of the amphibian converted the remote-control system so that the Alligator could be directed from the air, and it was driven in and out of the sea, and up and down the beach, guided entirely by one of Goodeve's associates flying above the Devon coast.

The Alligator passed all its trials with colors flying, but—exasperatingly enough for the Wheezers and Dodgers who had created this strange and menacing craft—it suffered the same fate as the Panjandrum. No promising targets could be spied for it on the vital stretch of the Normandy coast and, although development continued in the hope that it might be given its baptism of fire in the Far East, it never found an enemy stronghold to destroy.

Although Goodeve's personal role in the Panjandrum and Alligator experiments was one of encouragement, and guidance through the maze of red tape that often threatened to choke unorthodox projects, he was himself largely responsible for developing the strange genius of Ronald Hamilton whose invention of Lily, the floating runway for aircraft, is considered one of the most important advances to come out of World War II. Planned for use in the final assault on Japan, it was never tried under actual combat conditions. Goodeve had first met Hamilton in his one-man laboratory in a bombed-out wing of the Grosvenor Hotel and had taken him on the DMWD staff. From their labors came the fantastic Swiss Roll, a floating runway eventually used at Arromanches to put trucks and supplies ashore after D-Day.

Using the same principle as the Swiss Roll, but making his floating carpet flexible laterally as well as longitudinally, Hamilton found that he could build whole artificial islands of any shape or size on the surface of the sea. They were made of hundreds of hexagonal buoyancy cans, six feet wide and thirty inches deep, which were linked and clamped together so ingeniously that they gave in controlled undulations while retaining a surface rigid enough to take the weight of heavy aircraft. The flexibility of these man-made islands could be simply controlled by the action of underwater dampers.

The Wheezers and Dodgers held the first full-scale trials of Lily off Lamlash in the Isle of Arran. They found it was easily possible to assemble a strip five hundred and fifty feet long and sixty feet wide in an hour, using a working party of forty men, and from this runway a Swordfish aircraft made a series of rocket-assisted take-offs. Lily's flexibility formed a saucerlike depression under the Swordfish's weight. This lengthened the take-off, as the plane had to climb out of its own depression, but it slowed the aircraft down very conveniently in the last fifty feet of its landing.

Pilots reported that touching down on

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With these stirring words, immortalized in Robbie Burns' poem, King Robert the Bruce addressed his army before the Battle of Bannockburn in 1314. With true Scottish spirit the pikemen stood firm and the enemy troops finally broke and fled.



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NEVIL SHUTE NORWAY, better known as a best-selling novelist, was DMWD's rocket expert. Panjandrum was his baby.

"In a wind approaching gale force the Wheezers and Dodgers laid down an entire island on the sea"

the island was little different from landing on the deck of a carrier. They had, however, one or two tense moments when a powerful motorboat was used to make artificial waves, circling around the Lily field. On one occasion the Swordfish's propeller tips, tilted down by the wave undulations, struck the metal surface of the runway.

The experimental strip at Lamlash was deliberately limited in size, and only Swordfish and Auster aircraft could use it, but Hamilton showed by calculation that a similar runway twelve hundred feet long and ninety feet wide would comfortably take a Hurricane fighter, and winds up to sixty mph would not put the airstrip out of action. When he had fitted his special dampers to the underside of the island Lily remained quite flat in waves up to thirty-six feet from crest to crest. The airfield could be easily dismantled, moved and reassembled, and more than once in those wild waters off the Scottish coast an impressive demonstration of this was given. In a wind approaching gale force an entire island was laid down on the sea and made secure by only two men.

The importance of Hamilton's discovery is plain. Now it is possible for one ship to carry a whole airfield without difficulty and a handful of men can assemble it practically anywhere on the seven seas.

The boat that ran by radio

Many of DMWD's most revolutionary ideas were born in desperate circumstances, in attempts to block some new offensive weapon of the enemy's or to find some way to minimize the blood bath threatened in the invasion of France. Invention would build on invention and, as circumstances changed, many promising ideas would be reluctantly bypassed. Several of these were in the robot field.

Commander John Dove, one of the original Wheezers and Dodgers, devised an explosive motorboat to attack the German shipping that crept around Cap Gris Nez at night. It was the complete robot. Under radio control it could start itself, slip from its moorings unaided, and set off on a gyro course plotted by the radar sets that directed the big guns at Dover.

Dove brought his boat up the Thames to demonstrate it. Although on that memorable occasion something went wrong with the remote-control system, and the boat charged the wall below the Houses of Parliament, he eventually induced the robot mechanism to work with such uncanny accuracy that the craft could be homed onto a target twenty miles away with an error of only twenty yards.

As things turned out, however, it was destined never to be used in its explosive role, for a much more important task cropped up. The development of the boat went forward as an invasion project and, stripped of its explosive apparatus, it became a cog in the elaborate deception plans evolved for D-Day.

One of the most secret projects tackled by Charles Goodeve's versatile crew was the development of protective clothing to enable frogmen to withstand explosions under water. Current progress is still shrouded in secrecy, a fact that can be gauged by the recent uproar over Commander Lionel Crabb, the British frogman who disappeared near the Russian warships during the visit to Britain of Bulganin and Khrushchev. The problem was first put to Goodeve when the inva-

sion planners were worrying in advance about restoring Cherbourg as a workable port. It was bound to be heavily sown with delayed-action mines and booby traps which would have to be tackled individually by frogmen.

The more Goodeve thought about this, the more it worried him. He was convinced that the frogmen volunteering for this task would have little chance of surviv-

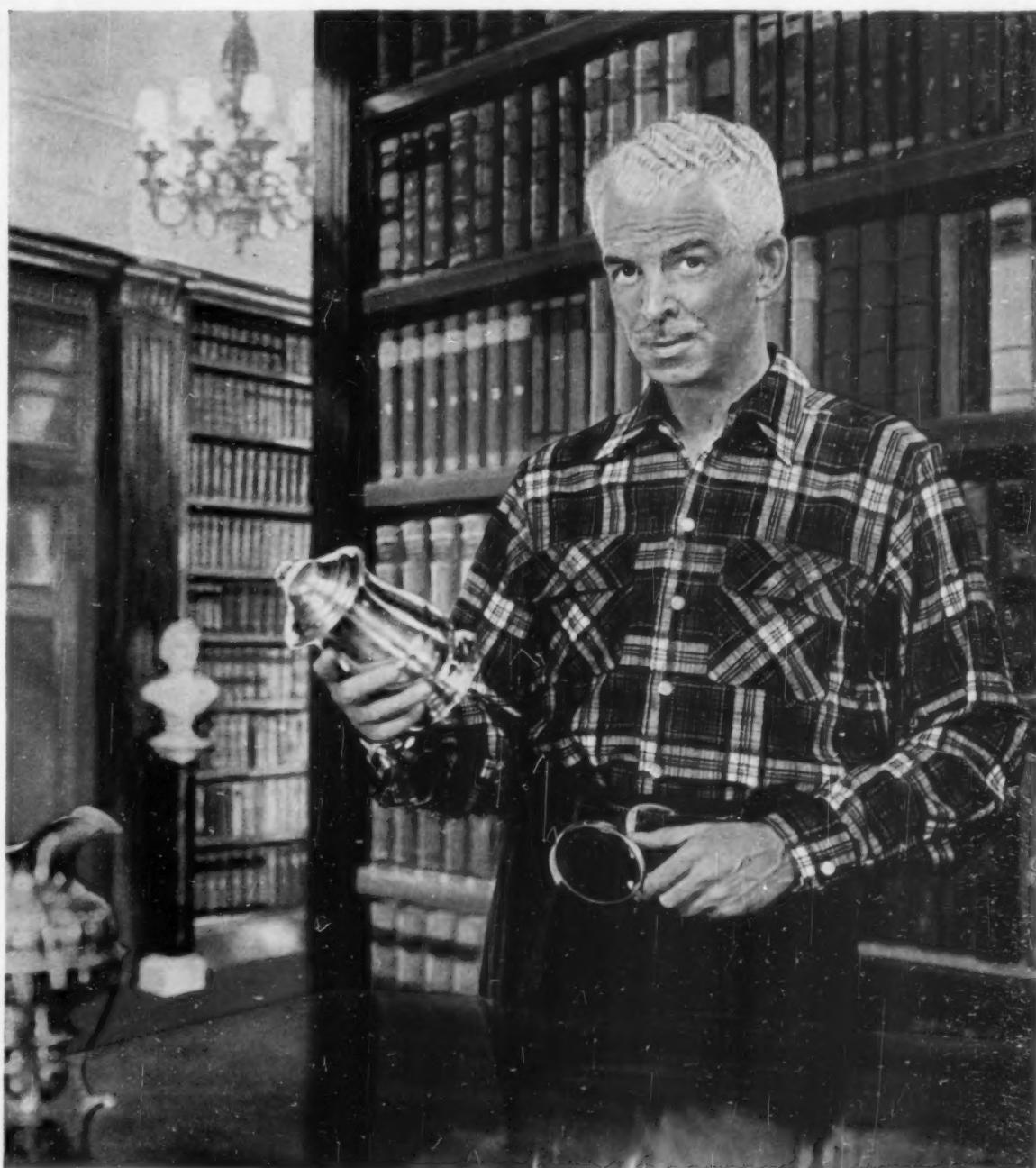
ing underwater explosions unless they could be provided with some form of protective clothing. Eventually he put the problem to Surgeon-Commander C. L. G. Pratt RNVR, the medical officer in charge of the Royal Navy's Physiological Laboratory.

"I know we can't protect these chaps against an explosion at very short range," Goodeve said, "but we must find a way

of reducing the risk. Do you think you can design some sort of suit which will give at least a measure of protection against underwater blast?"

"How long can you give us?" Pratt asked. "If we were going to tackle a job like that thoroughly in peacetime it might take anything up to two years."

Goodeve thought for a moment. "You've got only six weeks," he said. "In



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How Goodeve's team saved frogmen's lives

Risking their lives several times a day, some of the Wheezers and Dodgers tested experimental clothing designed to help frogmen withstand underwater explosions.

that time the suits must be tested, made and distributed."

After exhaustive tests in a deep seawater lake on Horsea Island, Pratt drew up a program of trials with human subjects. The aim was to expose each man to a series of explosions, increasing the severity of these step by step until he reached the limit of his endurance or showed signs of slight injury.

The first to subject themselves to this ordeal were Pratt and Dr. Edward Case, in peacetime a Cambridge biochemist. Dressed in ordinary frogmen's suits they were rowed out to the centre of the lake and then, clambering awkwardly over the side of their small boat, they disappeared below the surface.

They advanced to within seventy feet of the charge. At that distance the blast lifted them bodily in the water and a violent stinging sensation attacked their hands, wrists and neck. They were brought to the surface and a doctor examined them. Then they went down again and the tests continued, the depth of the charge being varied while the distance between the subject and the charge was also changed before each explosion.

From these preliminary trials, Pratt and his helpers designed three different types of kapok jerkin. Then the experiments on the bed of the lake began again.

Wearing protective clothing the volunteers now approached much nearer to the demolition charges and at forty feet they were severely buffeted. Case's experience was typical. He felt a terrific blow on the head—"it was like being hit with a cricket bat"—and for a second or two he staggered blindly about, unable to collect his senses. His chest hurt and he had a ringing pain in his ears. At this close range the stinging sensation he had experienced before became an acute pain, accompanied by an unpleasant numbness in his hands as if they were turning to ice. To make matters worse the force of the explosion displaced his face-piece, with its breathing tube, and it filled with water.

For a long time after they had been brought ashore Pratt, Case and Lieut. Guy Boissard RNVR, an Australian who had asked to be allowed to take part in the experiments, all suffered from splitting headaches. It was therefore decided not to shorten the distance any further, for it seemed all too likely that they might be stunned, seriously injured or drowned, but they carried on with the tests, trying out several different suits. As many as four times a day they went down into the icy depths of the lake. The ordeal left them battered and tired, with excruciating aches in the knees, elbows

and shoulders. In time the pain spread to smaller joints like the wrists and fingers and was to persist for several weeks.

A third series of underwater tests was launched with a fresh team of volunteers headed by a young New Zealander, Sub-Lieut. W. J. L. Smith. Often when they were brought to the surface of the lake the battered and semiconscious men had great difficulty in describing their strange new experiences to the waiting scientists. But they stuck to their task, and all the information that Pratt needed was finally secured.

It is not possible to recount the precise steps that were taken to neutralize the effect of explosions under water, but the protective suit that was produced in time for use on the sea bed at Cherbourg was triumphantly successful. Wearing it, the "P" parties, as the frogmen who volunteered for this dangerous mission were officially known, searched over two million square feet of the port. Much of the time they were in total darkness and had to fight their way through deep mud, with wreckage of all descriptions littering their path, but they located and destroyed hundreds of mines.

Throughout the war Goodeve was always treading the thin line between the inventive genius and the crackpot zealot. He listened patiently to schemes for building an anti-aircraft mountain, thousands of feet high, in Kent from which anti-aircraft gunners would shoot down the highest-flying bombers attacking London, to plans for death rays, space ships, dazzle guns, and artificial tidal waves.

One incredible project he still remembers began one morning when he received a message that a Very Important Person wanted to see him immediately. Dropping everything he called on the Great Man and was introduced to a stranger—a civilian who, he gathered, was an engineer.

"Mr. Blank has an idea which I'd like you to look at, Goodeve," said the Great Man. "It's a countermeasure to these flying bombs. Would you let him show you the details? I'd like a report as soon as possible."

In Goodeve's office the visitor opened a bulging brief case and extracted a mass of papers which he spread all over the floor.

"It's really quite simple," he remarked. "You know the barrage balloons?"

Goodeve said he did.

"Well, then," went on the visitor, "you send up hundreds of those balloons across the normal route of the flying bombs and to the cable of each you connect this apparatus of mine. It consists of a cylin-

der of oxygen, joined to a small benzine tank by an electro-magnetic release valve. On the other side of the benzine tank is a bath containing a soap solution. Do I make myself clear?"

"Perfectly," said Goodeve. "Please go on."

"Now we come to crux of the whole scheme. The mixture finally emerges into the air in a series of huge bubbles . . ."

Goodeve sat up. "I'm afraid I don't quite see what these bubbles of yours can do to destroy the flying bombs," he said a little sharply.

"Come now, Dr. Goodeve!" chided the inventor. "Surely it must be obvious. Over come the flying bombs and, as they pass, they suck my bubbles into their intake system. Immediately the bombs will explode in mid-air."

For a moment Goodeve remained speechless. He had left vital work to waste time on a project that had no basis of scientific probability whatever. When he sought to dispose of the matter, however, he found himself in a quandary. The Soap Bubble Scheme was far too ludicrous to send to any Admiralty department for their comments; indeed, it hardly concerned the Admiralty in any case. But the Great Man was interested in it and had asked him for a report. Obviously it would have to be treated sympathetically.

After pondering for several days he had a brainwave and dictated a letter to the inventor thanking him warmly for the public spirit he had shown in bringing his scheme to the notice of the Royal Navy.

"I would, however, like to point out," he continued, "that flying bombs are themselves propelled by a series of explosions far more violent than would be created by the introduction of your bubbles. What your scheme would, in fact, achieve is a refuelling of the bombs in flight, and here you may well have hit upon a most important discovery. If you can increase the strength of your mixture it may be possible to accelerate the flight and range of the bombs so considerably that they will pass right over London and land in the open country beyond. I am convinced that you should reconsider your idea in this light and then put it up again—to the Air Ministry, not the Admiralty."

A day or two later the inventor rang up Goodeve. "That letter you wrote to me," he began cautiously, "I believe you are pulling my leg!"

"Why should you think that?" purred Goodeve.

"Well . . . I think you are."

"In that case," Goodeve remarked with a chuckle, "I wouldn't feel disposed to contradict you." ★

This series of articles, now concluded, will be included in Gerald Pawle's book, The Secret War 1939-1945, to be published later by George G. Harrap, London, and Clarke Irwin, Toronto.

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The life and death mystery of your liver

Continued from page 25

Is it to blame for that Blue Monday feeling?

ache, nausea, furred tongue, loss of appetite and spots before the eyes. Have these troubles anything to do with the liver?

Only the drug makers with ready remedies to sell seem to answer the question with real confidence. One uses the line: "It all depends on the liver." The Canadians who spend probably more than a million dollars a year on various nostrums for the liver apparently believe it. But medical opinion, while it is tolerant, gives the investment little support. Dr. Robert Volpe, a gland specialist at Toronto General Hospital, believes that liver pills are useless to the liver. "But, on the other hand," he adds, "they don't do any harm."

Doctors are not sure that the liver can go temporarily out of order. Some say it is possible; others say no. All are agreed that it would be difficult to prove the liver's guilt for that Monday-morning feeling.

Now have doctors solved the riddle of the liver's size. They know that it is a mammoth, wedge-shaped organ sitting at the top and to the right of the stomach and that, at between three and three and a half pounds, it is the heaviest organ in the body. They know that they can cut away up to seven eighths of an animal's liver before signs of impaired function begin to show. But what they don't know is the answer to the question: could humans get along with as little?

Because surgery on the human liver is still too dangerous for anything but the removal of surface growths, no one can be sure. Back in 1936 two German researchers named Bollman and Mann, using the less-advanced tests of that time, wrote that eighty percent of the human liver could be removed without apparent harm. In absence of a newer one, this figure is still accepted. It could mean that the liver is five times bigger than it need be.

In trying to establish how much of the liver bulk might be surplus, researchers came across another phenomenon: animal liver regrows when part is taken away. No one knows why, nor does anyone know for certain that the same would be true of the human liver. All that can be determined so far is that animal liver regrows at great speed and that it keeps growing until the original size and weight have been reached.

Researchers have discovered too that, though the heart and muscles were thought to be the hardest-working organs in the human body, this place of virtue actually belongs to the liver. But they still don't know all the things that hard work is accomplishing.

Among what may be relatively few of the liver's functions that scientists are agreed on is the organ's responsibility for making bile. It does this at the rate of about a half a gallon a day and passes the greenish-yellow bitter-tasting fluid for storage to the gall bladder. There it waits until mealtimes when it is released to the intestine.

Bile has two duties to perform: one of these is to help the liver play a role as guardian of the body. The liver watches for incoming poisons, intercepts them



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before they reach the general circulatory system; then the bile carries them away for disposal. The bile's second job is to convert fats into a milky fluid for easy digestion. It alone has the power to do this; without it, the absorption of fats into the body would be impaired.

But the job of making bile is a long way from being the liver's biggest function. The liver is a very intricate chemical plant that works over the food you eat, rearranging it, storing, and distributing it in the way your body can absorb it best. Nothing can pass from the stomach into the blood stream without going through this treatment, and if one function could be isolated as the most important (which is doubtful), it is perhaps the responsibility of the liver—aided by the hormone insulin—to keep the right amount of energy-giving sugar in the blood. Without this sugar, life would end in convulsions and coma after eight hours.

Carbohydrates, proteins and fats are the three food families human tissue needs. The liver can convert all of these into the critical sugar if it has to. But since carbohydrates are largely sugars already, it uses them first. If the supply is enough, it will save proteins and fats for other jobs.

The army was embarrassed

Even incoming sugar brings a complex chemical problem with it. The body wants its sugar in the simplest form possible—glucose. So the intestine is obliged to change all carbohydrate material into glucose before passing it along to the liver. However, the liver, which has to hold materials until it can find parts of the body to use them, cannot store glucose. So, with skill that only trained chemists would be able to measure, it processes glucose first into a material named glycogen; this it can store. When the muscles are hungry for sugar, which they "burn" as they work, it quickly completes the job by making glycogen back into glucose—a fairly simple chemical step—and releases it to the blood. And flagging energy returns.

The job of breaking down proteins tests the liver's chemical skill less but calls for immense precision in gathering, storing and releasing to the blood just the right amounts at just the right times.

Fats make fewest demands on the liver—by being a threat to its health. Fat accumulation can cause disease in the organ's intricate and sensitive inside, so the liver stores very little of it—about four percent—checks the rest for wholesomeness and sends it quickly to "fat depots" throughout the fleshy parts of the body. This is the liver's way of providing against the risk of starvation; if it comes the liver recalls the fats, converts them to glycogen, then to glucose for ready release as energy.

A Canadian lumberjack has given medical men one of the most dramatic examples of the process in action. During the war he traded his back-straining work in the forests for the quiet life of an army quartermaster. Overnight the whole pattern of his life changed; but his appetite did not. Years of bull-moose-like eating had taken away his ability to judge input of food against output of energy. His liver faced a grave disposal problem. Far more energy-making material was coming in than his muscles burned up. Unable to reject anything but poisons it passed fats out to depots wherever it could find them and stepped up its own storage amount dangerously high. The lumberjack's topography began to change.

Army chiefs were embarrassed at the speed and amount of the change. They

saw their quartermaster fast growing into a monster. In time he outbulked the biggest uniforms, chairs and beds. When he hit the four-hundred-and-fifty-pound mark (a fifth of a ton), he was ordered to place himself before some surprised medical experts. One was a Toronto biochemist who has never forgotten the spectacle. "Without a doubt," he says, "he was the fattest man I ever saw."

Yet no very drastic treatment was necessary. He was put on a fat-free diet, had his carbohydrate intake cut down and was made to exercise. His liver, al-

though hampered by its own gross oversize, went to work recalling and converting the fat it had spread about his body, and his weight began to come down. But it took a year to shrink him back to his normal two hundred and fifty pounds.

Three pints of blood flow through the liver every minute in two separate supply lines—one from the heart, the other from the intestines. If nothing more remarkable than this could be said of it, the liver would still be unusual on two counts, for few other organs have two

supplies and no other large organ uses secondhand unpurified blood delivered to it from a neighboring organ.

The supply from the heart is the normal flow of oxygen-loaded blood needed by all organs in the body. The other source is incoming food carried by slow-moving blood in what is called the portal vein.

As soon as food is swallowed it is attacked by digestive juices and dissolved into a rich liquid. The nutrient in this liquid seeps into the intestine walls to meet a lacework of tiny veins. These



"How much lighter?" said the Writer

"How light is a feather?" responded Goldie. "It's something to feel rather than define."

"Light as a breeze?" suggested the writer.

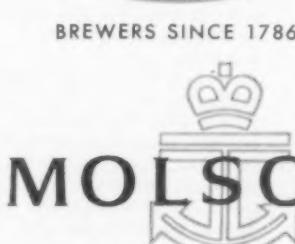
"Good," agreed the Golden Ale Lion thoughtfully, "but the lightness of Golden Ale is a matter of delicate balancing of ingredients to produce a bouquet and flavour no other can match."

"Drier too?" asked the writer.

"A mite" agreed Goldie, "but never, never bitter. Just enough of the hops to bypass unappetizing sweetness. Result: a clear, clean-tasting satisfaction."

"I'm thirsty," said the writer.

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DISTILLED, BLENDED AND BOTTLED IN SCOTLAND

127

How does the liver help make blood? The mystery opened an exciting twenty-year detective story

whisk it away, packed with nourishment, to the large portal vein leading straight to the strange and secret labyrinth of the liver's internal cells.

Liver cells all look alike under the microscope, a fact that still baffles scientists, for although the cells look the same, they cannot be since they take on so many and different jobs. How? "We just don't know," says one research man who is trying to find out. "It's one of the greatest mysteries we've run across."

Besides cleaning out poisons and sorting carbohydrates, proteins and fats, the liver is a vitamin centre. A, B1, B2, C, D and E—the six old, well-known ones—are all stored in its interior. But recently two more have been found—vitamins B12 and K.

The discovery of B12 is one of those exciting achievements that rarely come to research men.

It was suspected for years that the liver helps with the making of new blood cells. But how? In prenatal life, making blood is one of the liver's concerns. After birth it appears to leave this function to the bone marrow. Yet, although no one could explain them, there were signs that some connection between the liver and healthy blood corpuscles existed.

In the mid-1920s, for instance, doctors discovered that if patients suffering from pernicious anemia ate enough animal liver, their health improved. But until 1928, when liver extract was developed, the treatment was a terrible hardship: patients had to eat as much as a pound of raw animal liver a day to stay alive. After a few months, most began to wonder if the disease was as distressing as the cure. Even when the new extract made it possible to take liver by injection, the dosage was still large because doctors, unable to say which of the liver substances caused the improvement, had to include all of them. But at least science was now quite sure that somewhere inside it, the mysterious liver secreted an active blood-making material.

Efforts to trace it began in Britain and the U. S. After twenty years only two groups were still trying—the American Merck Research Laboratories and the Glaxo Laboratories, in Britain. Both teams were reporting some progress although they were using quite different techniques. Then in 1948 the medical world heard that both had reached the answer almost simultaneously—B12 had been found.

One of the big research difficulties has been that it comes in microscopic amounts. From four tons of animal liver just a fraction of an ounce of B12 can be found. And so far no one has found a way to make it synthetically. In 1952 an English doctor, Henry Marriott, wrote, "If a single grain of table salt were taken and divided into a hundred parts, a daily amount of B12 equal to one of those hundred parts would be more than enough to restore a patient with pernicious anemia to good health." And from then on the same minute quantity would only have to be taken about once a month.

Vitamin K is another precious body substance that was tracked down to the liver in 1939. It is an essential part of a complex chemical cocktail that ends up by giving blood the power to clot. It works in partnership with another substance found in the liver, heparin, that acts in the other direction, as an anti-clotting chemical. In delicate balance the

mixture of these and other fluids keeps the blood liquid in circulation and makes it clot when exposed to the air.

Yet, for all the knowledge that has come at last, today's medical men still find the liver a difficult contradictory organ. One mystery in particular casts a challenging shadow: if the liver is removed but sugar is fed in proper quantities to the blood, death comes swiftly. Why? The question has not been answered, and until it is no one can tell how much there is still to learn. Some experts think there is a liver function of prime importance to the body still undiscovered.

Meanwhile, treatment of liver disease has not kept pace with the better understanding of how the healthy liver works. It is here that modern physicians and research men face their biggest challenge.

Little can be done to help the victims of liver disease. Treatment for the most part is based simply on the idea that if you give it some sort of chance, this durable organ will cure itself. And it frequently does. It is not at all uncommon for cases of serious degeneration—cases where the liver is shrivelled—to return to health without much more than sensible diet and rest to help.

In Canada there is ignorance, too, of the extent of liver disease. Health experts are convinced it is increasing; but they can only guess how much. The Department of National Health and Welfare has few figures to show the incidence of liver complaints, and those that it does have it cannot safely trust.

A big difficulty Canadian authorities face is that each province makes its own rules about how, when and whether to report diseases to Ottawa. While this situation exists there is no hope of compiling figures of any value. Efforts are now being made to standardize reporting methods so that this statistical chaos can be tidied up. "But," explains an unemotional Ottawa official, "it will be a few years yet before this is accomplished."

Meanwhile, the health experts note that an ailing liver is more often listed by doctors as the cause of death today than it used to be; also that reports from the U. S. show sharp increases in liver disease rates throughout that country. American figures for jaundice are specially dramatic—the rate is said to have more than tripled in three years.

Infectious jaundice is the only known "catching" liver complaint. Its victim does not necessarily turn the ghostly yellow that most people expect him to. If he did, there would be fewer cases of mistaken diagnosis than there are. But the fact is that jaundice is an inflammation of the liver, which may look from the outside like flu, dysentery or typhoid. Health authorities believe that many a jaundice case is never recognized. Fortunately, it is seldom a killer. The patient usually makes a good recovery from whatever treatment is prescribed.

Another common jaundice can be caused by injections, inoculations and transfusions; it is often known as "transfusion jaundice" to distinguish it from its infectious relative. Doctors are equally nonplussed by this disease which can trick them into diagnosing an ailing gall bladder, stomach, intestine or pancreas.

The U. S. army fell victim to transfusion jaundice on the biggest scale ever during World War II. When some half a million men were vaccinated in 1942

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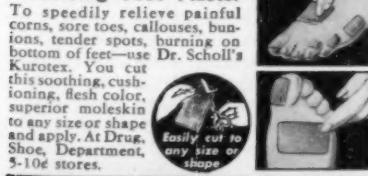
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against yellow fever, tens of thousands of them went down with "serum hepatitis"—officials for jaundice. The cost in money and man-hours was fantastic.

But it is cirrhosis that carries the rank of liver enemy number one. This disease destroys the liver; it is not an inflammation or a poisoning like other complaints although either poisoning or inflammation may sometimes result in cirrhosis. Liver attacked by cirrhosis first enlarges and then shrivels uselessly as its cells, crushed by scars, are strangled.

It has for long been believed that cirrhosis is closely connected with over-indulgence. Back in 1836 an English doctor, Thomas Addison, declared that a connection existed between too much of the good life and liver decay. He was the first to do so. "The most exquisite case I ever saw," he said as one piece of evidence, "occurred in a female who had for some time subsisted almost exclusively on ardent spirits." Once the thought had been mentioned, research men went to work. Animals were fed alcohol for prolonged periods, then had their livers removed for examination. Results seemed to confirm Dr. Addison's theory. As recently as 1947 a group of rats was fed ten percent alcohol alongside another group given the same food but no alcohol. Within two months the drinkers developed cirrhosis; the abstainers did not.

Besides this it was found that in Russia, where the common man has little to spend on luxuries, the disease is rare; only .02 percent of autopsies show it as the cause of death. But in North America where some seventy percent of the adult population drinks, the rate is close to two percent—a hundred times greater. So the case seemed closed; too much alcohol for too long adds up to cirrhosis.

But the reigning experts overlooked some signs that maybe this was less than the whole story. In Asia and Africa cirrhosis is common although alcohol is rare. In Australia, when the rains return after a lengthy drought to change the arid pastureland into a rich and juicy green, many grazing animals develop what is locally known as "walking disease." They become excited and stupid. They kick their heels high in the air, walk blindly into anything in their way, totter unknowingly into rivers and fall over cliffs. The slaughter rate is high. And walking disease is just another name for cirrhosis of the liver.

Then too, although most cirrhotic patients have been heavy drinkers, this is by no means true of all of them. Today a young girl lies in a Toronto hospital seriously ill with cirrhosis. For three years the doctors have fought unavailingly to cure her. It is thought now that maybe she has some unnamed, especially persistent form of the disease. Yet there is nothing in the background of this girl that is not entirely healthy and wholesome.

When all the facts are assembled there is room for doubt that alcohol could cause cirrhosis. In 1949 Toronto's Dr. C. H. Best decided to make new tests with greater accuracy than anyone had bothered with before.

He was not satisfied that past experimenters had made proper allowance for the caloric value of alcohol and its effect on diet. Again, one group of rats was fed alcohol in their drinking water while another group was not. But this time the caloric value of the alcohol was added (as sugar) to the diet of the abstaining rats. This time too Best saw to it that both groups, though eating less than normal because of the added caloric intake through alcohol on the one hand and through sugar on the other, received

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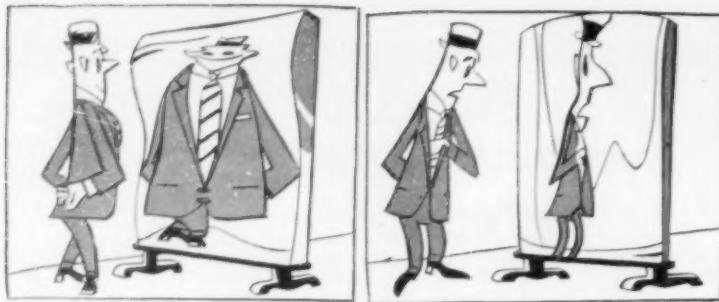
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properly balanced diets. When the rats were killed off and their livers examined, no disease was found in either group. So the earlier experiments had been misleading: the truth was that the rats could swallow alcohol regularly and still remain fit.

Best took the test a stage farther by cutting down rats of both groups on their protein intake. Now cirrhosis developed in all the victims' livers. The conclusion was that it is total diet that matters—not whether or not alcohol is swallowed.

A young doctor put the story in simple words: "A gin drinker's liver depends not so much on gin before dinner as gin instead of dinner."

So another small, hard-won step forward is taken.

The alcoholic swallows up to (sometimes more than) fifteen hundred calories a day in liquid form alone. This is the equivalent of fifteen five-ounce potatoes. It is not surprising that he eats too little and the wrong kind of food. Nor is it surprising, now, that although alcohol scarcely harms the liver, alcoholism often does. For as Dr. J. R. Bingham, of the Alcoholism Research Foundation in

Toronto, points out, alcoholics cannot be persuaded to eat. "If they controlled themselves well enough to eat," he says, "they wouldn't be alcoholics."

The final mystery in the whole perplexing subject is perhaps the fact that, serious as cirrhosis usually is, some people can go through life in its grip and never even know. Many an autopsy has shown advanced cirrhosis which was not the cause of death. Impossible in theory—but it happens.

So the liver adds another secret to the list. But not, perhaps, for long. For now there is a specialist trained in precision, patience and persistence who aims to tear the secrets out—the biochemist, a man much better matched for the job than anyone has been before. It is to him that medical science now turns for the answers it needs. "We can but hope," wrote a despairing Dr. A. L. Fawdry, of Aden, to the U. S. magazine Medical Press, "that he will so enlighten us that we physicians will find the patient before us, with his enlarged liver, less of an enigma than he often is at present."

The letter might have been signed by the entire medical fraternity of the world. ★

How Harry Orchard murdered twenty men

Continued from page 21



"On the lam ahead of posses and bloodhounds, fleeing to Montana, he was a legend of dread"

Orchard by the warden, who saw fit also to mention that, although a newspaperman, I no longer drank liquor. Orchard beamed.

The old prisoner had been sitting in a rocker reading Adventist literature and, at first, our talk turned to William Miller, the Vermont preacher generally credited with being the prophet of that church. On the wall of Orchard's little house was a homemade bookshelf. I noticed it held mostly religious books and inspirational works.

Our talk turned away from religion—finally to the specific crime that had brought him to prison, and also to many other crimes he had committed but of which he had never been suspected, much less arrested. Indeed, during a busy decade of crime studded with wife desertion, bigamy, burglary, arson, assorted larceny, and perhaps twenty murders, he was arrested only once.

We sat and talked out the long hot afternoon, while the air of the prison yard was filled with the drone of August insects and an occasional baying from the penitentiary bloodhounds in nearby kennels. I watched to see if the mournful voices of the dogs had an effect on Orchard, who had often smeared his shoes with turpentine, or used pepper, to preclude tracking. None was visible. Bemused at sitting by this man whom Clarence Darrow had told me had "ice water for blood and no nerves whatever," I took out a cigarette and lighted it. Orchard sat back in his chair and looked me in the eye. He clucked. "Young man," he said, both reproach and warning in his voice, "don't you know that those things lead to crime?"

For a moment I thought it a mere pleasantries. But no, this killer of twenty men was serious.

Only by some effort was I able to dispose of the picture of this commonplace figure, rocking comfortably in his homemade chair, and replace it with an image of Orchard the dynamite man.

When I first saw him, thirty-five years after his valedictory crime, Orchard was still a legend of dread in the hard-rock mining camps and other parts of western United States. One saw him plainly in the legend of the Coeur d'Alenes, aboard a train running wild down Burke Canyon; one watched him packing a box of giant powder to the Bunker Hill & Sullivan concentrator; then on the lam ahead of posses and bloodhounds over the hump into Montana. He appears again in Colorado, high-grading rich lodes of ore between spells of blowing up mine bosses, shaft houses, railroad stations, and a whole shift of non-union miners. One sees him again as Thomas S. Hogan, riding the steamcars to lethal jobs in Utah and Nevada, in California and Idaho, beside him on a seat in the smoker his black valise.

This valise is his professional bag. It has been packed with care. In it are his groceries—a bottle of whisky, a can of cayenne pepper, and the equipment of his calling: a neat package of No. 1 gelatin powder in sticks, a box of detonating caps, a vial of sulphuric acid, some plaster of Paris, an alarm clock, a few lengths of stout linen fishline, a roll of fine wire; a box of strichine crystals; and, for emergencies, a loaded revolver. Up in the baggage car rides his trunk. In it are several suits and assorted work clothes; a repeating shotgun and ammunition, and a twenty-five-pound bomb suitable for "heavy work."

Such was the legendary Orchard. Few legends have so much real substance. Unlike so many popular Bad Men, Orch-

ard's career did not lend itself to the Robin Hood myth. He neither robbed the rich nor gave to the poor. He was strictly a professional, all business. As a lethal character he possibly stood alone.

He was born Albert E. Horsley on March 18, 1866, in Northumberland County, Ontario, when that province was Upper Canada. Albert's parents were farming people. His father was a harsh man to his two sons and six daughters. He was also an incompetent. One after the other, as the youngsters were put out to work, the old man showed up to collect the few dollars they earned.

By the time he was twenty-one Albert had left home for the lumber camps of Michigan, which paid more money than those in Ontario. What's more, it was money to spend himself. It was the hallowed custom of the loggers to break their winter's work with a visit at Christmas to the fleshpots of Saginaw City, a town whose second industry was inadequately described as the supplying of fun, frolic and fighting; and among the six or seven thousand men from the woods who came to holiday there, during the last week of 1888, was young Albert Horsley. "I never," he was to recall late in life, "I never in all my experience saw a rougher, tougher place than Saginaw City"—this by a man who knew intimately such cities as Butte, Denver and San Francisco in their heyday, and the far-from-genteel towns of Cripple Creek and Telluride, Colorado.

Short cuts led to perjury

The gaslights of Saginaw City must have brightened the eyes of Water Street girls and put a glint into the cheap whisky sold along that lively thoroughfare. "I was captivated by it," the old man who had known it in '88 admitted. "It was my first experience with immorality and wickedness." He could not have caroused long that season, however, for in the spring he had enough wages to return to Ontario and marry "Florence, a Scotch lass."

Cheese-making was the leading industry in Orchard's native part of Northumberland County. Florence was an expert. The newlyweds rented an old factory and started in. Florence took charge of the actual manufacture. Albert went around to the farms, collecting milk, and attended to the selling of the finished product.

All went well for a time, but Albert seems not to have understood the necessity of getting clean fresh milk, pressing the new cheese exactly to a prescription, and knowing how to ripen it. He didn't have the patience for all that. But he had become something of a man of affairs, driving a fast rig, drinking now and then, gambling with lodge brothers. He also found shortcuts to make more money from the cheese business, short-weighing the milk he bought and the cheese he sold. He made deals with county cheese inspectors, mixed in politics and once went so far as to purchase votes for a member of the provincial legislature. For this he was threatened with prosecution and saved himself only by fast and effective perjury.

The petty larceny in cheese-making didn't pay off and Horsley persuaded his wife to sell the factory. They then took over another cheese factory to operate on shares. Albert borrowed money to open still another cheese factory at Brighton, Ont. While supervising the building of this factory Albert boarded with a Brighton man and his wife. "I became infatuated with the woman," he confessed.

He decided to go west "and start all over again." To do this he insured the

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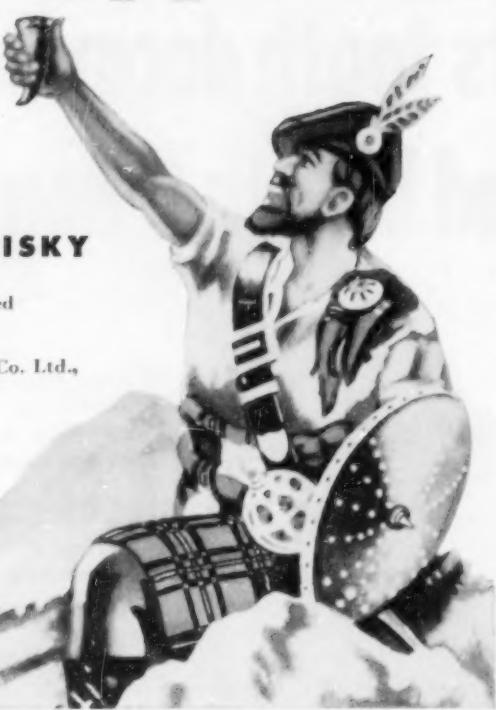
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new factory. A few months later, "on a moonless night," he crept through the streets of Brighton, a can of kerosene in one hand, a bundle of excelsior in the other. He collected eight hundred dollars for his first job of arson.

Mrs. Horsley had given birth to a daughter. Albert moved his family into the home of relatives. Then he dropped out of sight so completely that neither his wife nor anyone else in the community was to know what had become of him until years later. What he did was take a train to Detroit. His Brighton landlady was also on the train. They registered in a Detroit hotel as Mr. and Mrs. John Little.

The unhallowed honeymoon lasted one week. By then the couple admitted they had made a mistake. But they were too deeply involved to return to Northumberland County. They bought train tickets to Nelson, B.C.

The new Mr. Little found Nelson a dreary spot, although it had plenty of saloons and dance halls. When he discovered that Mrs. Little had been secretly writing to her mother back in Northumberland County, he cheerfully suggested that she try to get together again with her husband too and put her on the train. He left for Seattle, where he took the name of Harry Orchard, apparently to prevent his own wife, Florence Horsley, from tracking him down, for the scandal of Mr. and Mrs. John Little became known to her as soon as "Mrs. Little" returned home.

It was as Harry Orchard that he turned up in the Coeur d'Alene mining area of Idaho in the mid-Nineties. He delivered milk, ran a fuel business, became part owner of a mine, caroused, gambled and went broke. On the last day of March 1899 he went to work as a mucker underground, as a member of the Western Federation of Miners. It was as a union-card holder of the federation that he was in the next seven years to become a figure of terror in the western U.S. mine areas.

It was a time of change in mine workings. Small outfits were disappearing into big corporations, which were run by resident managers but controlled from Spokane, Portland, San Francisco or New York. The free-and-easy relationship of miner and mine owner gave way to suspicion and fear. Miners became "arrogant." Mine owners turned "greedy."

In this atmosphere in Idaho's Coeur d'Alene district small unions were formed in the various mine

towns—Burke, Gem, Mullan, Wardner and others—and then banded into the Coeur d'Alene Executive Miners' Union. Mine owners reacted by forming the Mine Owners' Protective Association.

A clash was inevitable and in 1892 it came. In a bitter strike miners dynamited a mine, owners' guards killed three miners, martial law was declared in the Coeur d'Alenes. The result was to make the mine unions stronger than ever. Out of the strife came the Western Federation of Miners which in six years grew to have two hundred local unions and a sphere of influence reaching throughout the western U.S. into British Columbia.

When Harry Orchard got his card from the Western Federation the union was in the midst of further turmoil. Ed Boyce, the man who had done most to spread its influence, had called out thirty-five hundred miners in a wage dispute. Violence spread. One day twelve hundred miners descended in a stolen train on the town of Wardner to blow up the mill of the big Bunker Hill & Sullivan mine—one of the largest ore concentrators in the U.S.

When a call went through the ranks of miners to set off the charges of dynamite, Harry Orchard was one of the first to step forward. And when a state of anarchy was declared in the whole Coeur d'Alenes, Harry Orchard was one of the first to flee.

Thus began his life as a dynamiter and a fugitive. To avoid arrest he fled across the Bitterroot mountains to Montana, along with hundreds of other Coeur d'Alene miners. For the next three years he stayed on the lam—in Montana, Utah, California and in Oregon. Then, early in July of 1902, he turned up in Cripple Creek, Colorado.

Like most mining camps, Cripple Creek was set in a somewhat appalling region. Volcanoes had piled up the hills. Steaming-hot waters from deep in the earth percolated to the surface, bearing gold telluride in solution, with quartz. The whole area presented a rough, gaunt aspect of barren rocky ridges, almost arid, with sudden valleys marked by scrub trees and in season with a wealth of alpine flowers. These brief patches of brilliance, however, did little to soften the feeling that here was a grim and bitter country. Yet, in 1902, fifty thousand human beings made it their home.

This was the region where the talents of Harry Orchard were to have their first flowering. It was mere chance that had made him a miner just in time to take



Where Harry Orchard began his mass murders

At Altman, Colorado, a dynamite trap killed two men and shook the town.

part in the violent events in the Coeur d'Alenes. Now, it was his fate to arrive in Cripple Creek only a little before that district, too, was ready to explode. The opposing forces were the same here as in Idaho. They had been gathering strength in Cripple Creek for almost as long. The conflict here was to be more sanguinary. It was to involve more men.

But the issue was the same—security for miners. In a U.S.-wide money panic of 1893, silver prices slumped and many western mines collapsed. There were bread lines all over. Also, in eastern coal fields, there were violent strikes. Not so Cripple Creek, whose gold mines continued to run full blast. Miners flooded in from everywhere. To some mine operators it seemed a propitious time to get more work for the same pay. Presently all mines in the district posted notices that on Feb. 1, 1894, the working shift would be ten instead of the usual eight or nine hours. Outraged nonunion miners quickly aligned themselves with the Western Federation of Miners, including a new local at Altman in the Cripple Creek district called the Free Coinage Union No. 19.

One who knew the Cripple Creek miners of this era observed that they were not the mining population familiar to the eastern coal fields. Few were foreign-born. They were "neither ignorant nor easily cowed," but were "of the characteristic frontiersman type." They had come to Cripple Creek "not so much to find work as to seek fortune." They were rough, ready, used to shifting for themselves. They were reckless. And they had "small respect for authority." Mine operators were as much frontiersmen as the working stiffs.

Open war on Bull Hill

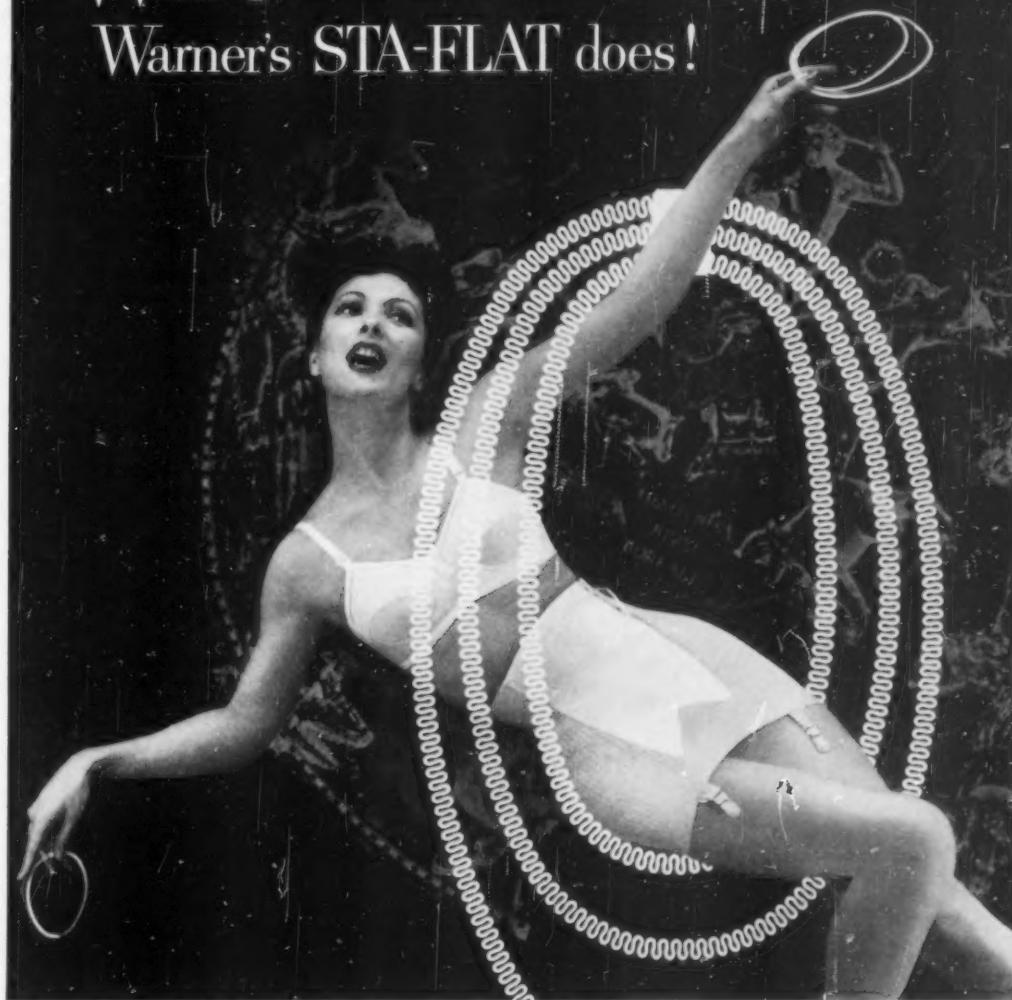
With such forces arrayed against each other, it was not astonishing that nothing came of the few attempts to find a basis for settlement. On February 1 the mines went to the ten-hour shift. On the 7th, parties of union men circulated throughout the district, calling out the men. By noon every mine was closed save the Portland, Pikes Peak, Gold Dollar, and a few smaller outfits, all of which had agreed to an eight-hour shift.

There followed a series of explosive incidents. Governor Davis H. Waite ordered out the state militia to guard the smoldering areas; miners established a military camp on Bull Hill, a steep bluff commanding the town of Altman; mine operators imported carloads of gunmen from Denver to assault the hill; a mine at Altman's neighboring town of Victor was blown up. Men were killed attacking mines and defending them. It was open war. The state militia stepped in and ended it.

This was the background of violence in Cripple Creek when Harry Orchard appeared there. Three figures were already behind the scenes to direct even more. They were Charles H. Moyer, who had succeeded Ed Boyce as president of the Western Federation; William Dudley (Big Bill) Haywood, the new secretary-treasurer, a powerful, ambitious man, and George A. Pettibone, a store-keeper by trade but a chemist and dynamiter by profession. He was also an adviser to the Western Federation and was held in high regard by both Moyer and Haywood.

It is improbable that any of these three men ever had heard of Harry Orchard when he arrived in Colorado and applied for membership in the Free Coinage Union No. 19 of the Western Federation of Miners at Altman, high on Bull Hill. He was just another hard-rock ho-

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you need it: tummy, waist, midriff.

"There's a whole carload of powder down there," said Orchard. "You could blow it up and kill everybody!"

bo, a nondescript boomer, out on a tour of drinking, wenching, gambling. It was Haywood, Moyer and Pettibone who were to give direction and meaning to what up to now had been Orchard's rudderless life.

Orchard shifted from job to job at Cripple Creek, stole rich quartz from mine owners (the practice known as highgrading) and married a wealthy widow al-

though he was already married. Then his fortunes changed when the Western Federation called thirty-five hundred members out of fifty Cripple Creek mines to support smelter workers striking in Colorado City.

President Moyer and secretary Haywood of the federation were determined to win recognition for the union throughout Colorado. An old pal of Orchard's

from the Coeur d'Alenes, W. F. Davis, told him that the federation officials were ready to make Colorado "a slaughter ground" if necessary. Davis was now president of the Free Coinage Union.

Orchard didn't like the look of things and vanished on a drinking bout with a friend, Johnnie Neville. When they returned the situation looked even blacker for the strikers; more and more mines

were opening with nonunion crews; union miners too were slinking back to their old jobs. Orchard grew nervous and restless. He needed money and thought of picking up some highgrading. He looked up a pal, Joe Schultz, with whom he had stolen quartz in the Vindicator mine where they had worked together. They went down to scout the possibilities of further thefts, and Orchard noticed a car of dynamite on the eighth level of the mine. He had an idea.

Next day, in the union hall, he talked to Davis, the union boss. Davis seemed desperate. More strikebreakers were coming into the district daily, he said, and several mines were working with full crews. "If we can't do something to scare the scabs from entering the district," he said, "and scare our own men to keep them in line, we're going to lose this strike."

Orchard broached his idea. "There's a whole carload of powder in one place in the Vindicator," he said. "If the boys want to do something, they could go down and set it off. It would blow up the whole mine. Kill everybody down there." Davis seemed interested.

Orchard professed that he had made the suggestion more as a joke than anything else. Davis was not a joker. As the head man of the most radical union in the district, he knew that the executive board of the Western Federation would hold him responsible for failure of the strike. It was now failing fast. He made a business proposition: if Orchard would set off the powder, he could have two hundred dollars direct from Western Federation headquarters.

Orchard went to see Joe Schultz. Yes, he would go. That night, toting fuse and caps, they entered the Vindicator and went to the eighth level. The stock of powder was right where it had been, near the main-shaft station, which was bright with electric lights. The two men had planned to do their work as soon as the shift went to the surface for lunch at midnight. Now they waited for ten minutes or so in the dark stope to make sure all hands had gone up. They would have to work fast; the crew would be back in half an hour.

At ten minutes past midnight, Schultz and Orchard went to the brightly lighted station, which they had reason to believe was now deserted. It wasn't. A cage was there waiting, the cager in it, and alert. "Hurry up, boys," he called. "This is the last cage." He thought the two men were miners of the leg-dragging sort, always a little late, and he was irritated. "Hurry up," he repeated.

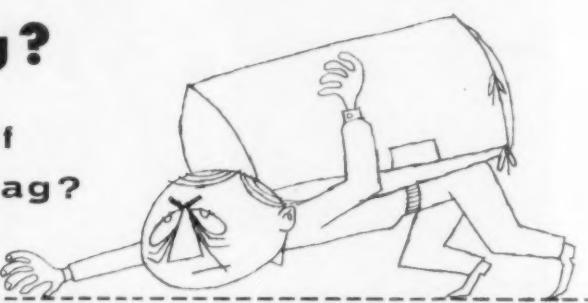
Orchard and Schultz were too astonished to say anything. They simply started to back down into the dark of a drift. The cager was suspicious. He lighted his lamp and started to follow the two strangers. He was gaining rapidly when Orchard pulled out his revolver and shot twice in his direction.

It was now up to Orchard and Schultz to get out of the Vindicator as fast as they could. By the time they approached the surface opening, according to Orchard's watch, a half hour had passed. He figured the mine by then was being searched by guards, and told himself it would be a wonder if the entrance they were heading for was not guarded too.

The Vindicator's captain of guards, however, did not know the mine as well as Orchard and Schultz did. It turned out he had posted an armed guard at every entrance except the one by which the two fugitives now made their exit.

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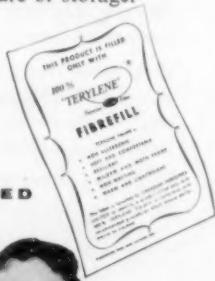
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Orchard scarcely had the nerve to demand two hundred dollars from Davis for an explosion that never went off. But he did ask for thirty-five dollars. He also asked Sherman Parker, secretary of Free Coinage Union, for money. Parker told him there wouldn't be any money unless "something was pulled off."

Orchard felt aggrieved, but was cheered presently when Davis and Parker came to him with another offer. If he could rig up some sort of a trap so that when the cage came down with a load of scabs it would set off an explosion, it would be worth five hundred dollars to him.

Joe Schultz wanted no part of the plan. Orchard thereupon looked up a couple of characters of whom little is known. Billy Aikman said he was not afraid of a little blood and would be glad to help, and Billy Gaffney was agreeable. Orchard went out and rustled twenty pounds of dynamite. He asked Gaffney if he could locate some more powder. Gaffney came back with thirty pounds. Every stick was frozen solid, but Gaffney had been a powderman in his day, and he thawed the stuff over the stove in his house.

A trap to blow up the mine

The conspirators planned in this fashion: Orchard and Aikman were to pack the powder into the mine and set the trap; Gaffney was to remain just inside the mouth of the shaft as lookout. At half-past two one cold morning in mid-November, the three men left Gaffney's house for the mine. Gaffney took post inside the shaft. The other two, each carrying twenty-five pounds of powder, went down an unguarded shaft to the fourth level, then across a long drift to shaft No. 1. Here they climbed down to what they thought was the seventh level—but was actually the sixth—and set the trap at the main-shaft station where miners left or took the cage, coming down or going up.

Orchard's scab exterminator was a complicated and ingenious device. He and Aikman first buried the powder in dirt and rubble on the mine floor close to the shaft. Then they fastened Orchard's revolver to a timber directly above the powder, and placed a box of fulminate caps a few inches from the gun's muzzle. They strung a slim wire from the gun's trigger to the guard rail of the shaft. Then Orchard cocked the revolver. The two men stopped briefly to admire the arrangement, then left.

Before Orchard was up next morning, W. F. Davis was at his house. He had expected to hear there had been an explosion that had torn the Vindicator into chips; but the day shift had gone to work and nothing had happened. Nothing happened that day, nor the next, nor the next. Orchard pumped everybody he dared to, trying to learn if there had been any changes in the levels being worked. The answer was always the same; the scabs were still on the seventh level.

On Nov. 21 the mystery cleared. On that morning Charles H. McCormick, superintendent of the Vindicator, and Melvin Beck, shift boss, were blown to bits when they stopped their cage at the sixth-level station, lifted the guard rail, and started to get off. The bungling Orchard and Aikman had mistaken the level and had set up their device on the sixth where no work was being done. For six days, as luck would have it, no cage had stopped at this station.

This explosion also had a powerful aftermath. Governor Peabody declared Teller County to be in a state of insur-

rection and rebellion. He cited the Vindicator incident as need for martial law. Within a couple of hours a major and a detail of fifty cavalrymen rode through Victor, Goldfield, Independence and Altman, stopping at each to read the governor's proclamation.

The local police were deposed. National Guardsmen were set to patrolling all the towns. Citizens were ordered to bring in their arms and turn them over to the military commander. The Western Federation hurriedly got out a handbill and distributed it throughout the district. It

was a message from federation president Moyer: "I strongly advise every (union) member to provide himself with the latest improved rifle . . . so that in two years we can hear the inspiring music of the martial tread of 25,000 armed men in the ranks of labor."

After several weeks of martial law, Cripple Creek became quiet and orderly. The troops were gradually withdrawn. By mid-January, 1904, only a hundred and seventy men remained on duty as a sort of token. On April 11, all guardsmen left the district. Although many

mines were still hampered by a lack of men, all mines were operating, either with imported nonunion miners or with local miners who had signed the new employment cards and thus disavowed union membership.

It would be a grave error to assume there is no pride, or jealousy, or artistic temperament in the ranks of professional hatchet men, or goons. During the period of quiet after the explosion, Harry Orchard got to brooding on the lack of appreciation of his efforts. For one thing, he had not been paid his fee. To be



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They called George Pettibone "the devil." He loved to work with dynamite and knew how to use it

sure, he had bungled the job by killing the wrong men, yet he certainly had "torn things loose," which was what president Davis of the Altman union had wanted. The explosion had certainly revived interest in the strike. It was common talk among strikers that Western Federation headquarters was wallowing in cash contributions from unions in Utah, Oregon, Idaho, Nevada, Montana,

and from British Columbia as well. Orchard decided to go to Denver to see Moyer, federation president, and Haywood, secretary-treasurer. He introduced himself, and was much pleased that these men recognized him as the perpetrator of the Vindicator job. The ebullient Haywood slapped him on the back and praised him mightily, saying that Orchard had "got two of the kind

we like to get," that one mine boss was "worth a carload of scabs." A few more jobs like that, Haywood declared, and "we would have everything our own way."

This was the kind of appreciation Orchard had long believed was his due. Haywood went on to tell him he should spend a few days in Denver enjoying himself, then go back to Cripple Creek

and tear something loose. He added that nothing Orchard could do would be "too fierce" to suit the federation.

On the second visit to federation headquarters he was introduced to George Pettibone, the chemist and dynamiter. Moyer referred to Pettibone as "the devil" because of the latter's abiding interest in dynamite and other explosive or inflammable materials.

At about this time preparations were being made for the annual convention of the Western Federation of Miners, to be held in Denver. Delegates from unions from all over the west were coming. The executive board thought something should be torn loose at convention time to impress the delegates that headquarters was on the job, fighting the battle for unionism. Various suggestions were made. The most popular was to "do something big" about the horde of scab miners in the Cripple Creek district. This was being planned when Pettibone interrupted a meeting of the executive board.

Lyte Gregory, he said, had just arrived in Denver. He had been a mine-company detective at Idaho Springs, Colorado, and in a strike in the coal fields of southern Colorado had been a leader of deputies and company gunmen. He was known as a hard character who enjoyed beating up miners and reputedly had once helped to mutilate a striker. The Western Federation's board knew enough about Gregory to tell Pettibone that yes, there should be something done about him.

Harry Orchard and Steve Adams, a Free Coinage Union friend, just happened to be in Denver. Pettibone led them to a saloon where Lyte Gregory was having a drink with Foster Milburn, a trustworthy union man from Idaho Springs, who had agreed to shepherd Gregory into range of the hatchet men.

Gregory tossed off another drink, then went out and got aboard a streetcar. Adams and Orchard took the same car. When Gregory got off he went into a saloon. Milburn followed on the next car. Leaving Adams and Milburn to watch Gregory, Orchard went to his hotel room to get a sawed-off shotgun he had brought from Cripple Creek. Then he returned by car to the saloon.

A little after midnight Gregory emerged from the saloon and started down the street alone, the three men following on the opposite side of the street. Then the three started across the street to reach Gregory. There was little light, and the hunters failed to see wires stretched along the sidewalk to protect the grass of the parking strip. They were moving rapidly when they hit the obstruction. Whether or not they fell, they made sufficient noise to warn Gregory. With the instinct of a veteran gun fighter, Gregory reached for his gun and began backing to a fence along the sidewalk. Orchard let him have it. At close range he shot the man three times.

Lyte Gregory fell dead before he could get his gun from its holster. The three men ran down an alley, then separated. By the time police got to the scene, all three were safe in their rooms.

Orchard attended the opening meeting of the Western Federation's convention. Only a few of the members knew who had killed the mine detective, but Orchard got no little satisfaction from hearing the unknown killer praised for his fine work.

Pettibone and W. F. Davis of the Altman union took Orchard aside and suggested that now was the time for him to return to Cripple Creek and "blow up

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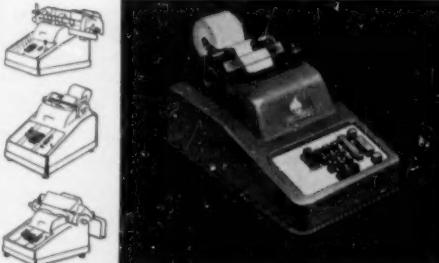


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something." Pettibone said Moyer was attempting to organize a faction in the Western Federation to oust Haywood. Pettibone and the Altman union men, along with many others, were sure to favor Haywood if the matter came to a showdown; but, said Pettibone, the affair might well bring on a split causing some of the districts to withdraw. What was needed right now was some incident that would unite all factions. Cripple Creek was the logical place for such an incident to happen. It was near enough to assure good coverage by the Denver newspapers.

"I don't think," Orchard told Pettibone, "it would be much trouble to blow up the railroad depot at Independence."

At this point Haywood joined the group. When the subject was explained, Haywood said it sounded like a good idea. He gave Orchard some money, warned him to use care.

The often direct mind of Harry Orchard had suggested the depot at Independence for logical reasons. If killing a batch of scabs was the goal desired, then this was the place to catch them when the early night shift quit the mines and gathered on the depot platform to take the 2:15 a.m. train to their homes. Orchard knew the terrain. He knew the depot. A device might be timed to go off after Harry Orchard had left the district.

The place where the depot stood was poorly lighted, a gloomy spot, full of pitfalls, abounding in chances for secret work and concealment—things Orchard had not overlooked. He had chosen well on all counts. Somewhat later a man familiar with the region remarked that the town of Independence was "the heart of the Cripple Creek mining industry" and that its railroad station was "in a spot peculiarly suited to the perpetration of crime and deeds of darkness."

A murderer needs an alibi

As a partner Orchard first sought out Billy Aikman; that experienced goon, however, had bought a half interest in an Independence saloon and thought he should tend to business. But his friend, Steve Adams, said he was ready for anything. Now for the explosive. Mine stocks were carefully guarded. Storekeepers were chary about selling the stuff. Orchard went to see an acquaintance, Floyd Miller, who was working on a lease and had a legitimate use for blasting powder, and said he'd like to get two boxes of giant caps and a hundred pounds of dynamite. Miller thought he could buy it. Orchard gave him the money.

That night Adams and Orchard went to Miller's home, got the powder, and carried it to a small unused cellar behind a deserted cabin not far from the depot. Adams had a key to the cabin. It was now Thursday evening. Orchard told Adams to meet him at the cabin Saturday night. They would then prepare the charge and set it off when the two-fifteen train arrived Sunday morning.

Orchard had also cooked up a scheme he believed would be workable, perhaps an airtight alibi in case he should be suspected. He had proposed to his friend Johnnie Neville that the two of them go on a fishing trip. Orchard—still thinking ahead—purchased a secondhand saddle, remarking that it might come in handy.

On Saturday evening Neville and Orchard loaded provisions into a team-drawn wagon. Some six miles out of Independence the fishermen made camp. Orchard saddled one of the horses. He told Neville that, no matter what happened, he, Orchard, was supposed to be there all night in the roadside camp. Then Orchard started back for Inde-

pendence, riding one of the horses.

When he had come within a mile of the station, Orchard tethered his horse in the bushes, and walked to the cabin. Steve Adams was there. It was ten o'clock. From the powder cache in the cellar Orchard took a small wooden box. Adams watched while Orchard went about making an infernal machine.

Orchard was one of the pioneers in the technique of the booby trap or set bomb. Terrorists in both Europe and the United States at that time were still throwing their bombs at their victims,

often sacrificing their own lives in the same explosion, or at best being caught while running away. Though his was no soaring imagination, Harry Orchard considered such methods silly. When one of his jobs let go, he meant to be in the clear.

While Adams held the flickering candle, Orchard went to work with a deftness that belied stubby fingers. He first made a tiny wooden windlass. To this he fastened, with strips of leather, two little empty vials. With his finger he spun the windlass. It turned perfectly. He ex-

plained to Adams that a slow steady pull on a wire would turn the windlass and spill the acid he would put into the vials on a pile of giant caps resting on the dynamite.

Each man picked up a box of dynamite and went over to the depot. It was dark. The night agent and telegraph operator had gone home. A long platform stretched across the front of the depot and extended beyond on both sides. The two men carried the dynamite as far as they could under the platform.

"This," Orchard recalled, "was ticklish



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"The little town lit up as if by lightning. Some men cried or moaned. Thirteen were blown to bits"

business. It was dark in there, under the platform, and I had to fill the little bottles without seeing them." (But his nerves were good—if Orchard had any nerves.) "I got out the bottle of sulphuric acid from my pocket. I put a piece of cardboard on top of the caps and powder, lest I spill some of the acid. Then I filled the two vials, bearing in mind that a single drop of the acid would set the whole thing off. To make everything doubly certain, I had sprinkled a mixture of sugar and potash on top of the caps. I knew the acid would set this on fire in an instant."

Orchard now attached one end of a long length of light wire to the windlass, then backed out from under the platform. He and Adams payed out the wire as they moved slowly away from the depot along a spur track to where stood an old ore house. Here Orchard took a few turns with the wire around a broken chair rung. The two men sat down to wait. Orchard produced a bottle of turpentine, and he and Adams smeared their boots to throw bloodhounds off their track should they be pursued.

A little before two o'clock the night began to lighten. The clouds blew away. A pale moon came out. Orchard complained it was a hell of a time for a moon. But soon they heard the wail of a locomotive echo against the high cliffs above. The Florence & Cripple Creek's two-fifteen was going to roll in on time. Orchard stood up, then picked the chair rung from the ground and motioned to Adams to take hold of one end of the stick. This was to be strictly a co-operative affair. The whistle was still echoing when the waiting men heard the miners—the scabs—come tearing down from the Findlay shaft house. In another two minutes, just as the train was putting on brakes for the depot, Orchard and Adams applied tension by pulling slowly on the chair rung. An instant later the charge went up with a fearful roar. A good part of the little sleeping town lit up as if by a flash of lightning.

It had been Orchard's intention to haul in all the wire as a precaution against leaving evidence to indicate how the dynamite had been set off, but he forgot all about wire in the rain of rocks and planks and other debris, including pieces and shreds of human beings, that beat down around him and Adams. The two men simply ran away as fast as they could, then separated. Orchard found his horse, mounted, and took off down the road toward Colorado Springs.

Phil Chandler, a miner, was lounging at the far end of the platform, and started walking toward the train, when there was a blot of flame accompanied by "a sharp noise, more like a whistle than an explosion," and he was blown "rapidly through the air," to fall on his thigh. Both legs were broken. He was lucky, for when he sat up to look around, the first man he saw was John Police, an Austrian, who had "gathered his footless legs in his arms and sat by the track, silently writhing."

Inside the cars the men for the graveyard shift of the Findlay mine were sprayed and cut by shattered glass from the windows. They piled out of the coaches to find a great yawning hole where the platform had been. By the light of the same waning moon that Harry Orchard had cursed only a few moments before, they could see indistinct forms scattered along the track. Some

were still and quiet. Others cried, or merely moaned.

The train backed away until the head lamp could light the scene, and the unharmed shift of miners went to work to separate the dead from the mangled but still living of their comrades of the early night shift. The two rows grew swiftly longer in the bright glare—thirteen dead, twenty-four badly injured.

While the dead were being removed, the space around the depot was roped off, and the ground searched. A possible clue was seen in about two hundred feet of wire running to a nearby stump where its end was attached to a chair rung. Bloodhounds were brought and put to work. The dogs might well have been confused in such a shambles, but in any case Orchard had brought along his bottle of turpentine.

True to the spirit and tradition of mine towns of the era, more violence was brewing. Before noon the commissioners of Teller County met in Victor. By common consent the explosion was attributed to the Western Federation of Miners. All sorts of wild rumors were going the rounds: every union man was to be driven from the district; union

Fire, I'm ready!

We drive in air-conditioned cars,
And sleep in air-conditioned flats,
And drink in air-conditioned bars,
And eat in nice, cool automat,
And get our entertainment in
Refrigerated cinemas,
And shiver in our icy skin,
And I, for one, shall shout huzzas
When winter's first big blizzard roars,
Thawing out the Great Indoors.

Philene Hammer

officers were to be burned at the stake. In the city of Victor, a community of more than twelve thousand, and almost in the heart of its business district, was a vacant lot. A steep bluff, topped by the Gold Coin shaft house, rose sheer on one side. Buildings formed two more sides, and the whole was a sort of amphitheatre. Across the street was the union hall. Near it was the miners' union store.

By two o'clock people were gathering here from all parts of the Cripple Creek district. An hour later the lot and the area round about was packed. The crowd was mostly men, though there was a scattering of women and many boys. A majority of the men were nonunion miners—but not all. It turned out that a good many, union and nonunion, were packing guns.

Clarence Hamlin, attorney and secretary of the mine owners' association, mounted an empty wagon near the centre of the lot and began to talk. He denounced union miners as cutthroats. He shouted that membership in the Western Federation was a badge of murder and arson. Some man in the crowd shouted an angry question. Another man struck the questioner in the face. Still another man drew a revolver and belted the head of the man who struck the questioner.

All was ready. A single shot was fired. Then came a fusillade—and cries, shouts, oaths, all the noises that two thousand

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people make in anger and in fear. The mob stampeded, stumbling, falling, trying to get somewhere, anywhere, away from this dusty piece of ground on which now lay five men, oozing blood. It was something of a miracle that, when the lot had cleared, only five men were down and only two were dead.

Next day the whole of Teller County was declared to be in a state of rebellion as mobs wrecked union halls and union stores throughout the Cripple Creek district and beat up union miners who dared appear. The violence lasted six weeks. Instead of showing mine owners and scabs who was boss, the explosion ended the influence of the Western Federation in Cripple Creek and in Colorado, finally.

There was no feeling of urgency in Harry Orchard to get out of Colorado. He was not a man fleeing. He boldly entered Denver the day after, when excitement was at its height, and met his accomplice, Adams. They went to federation headquarters where Orchard received the compliments of Haywood and Pettibone and collected three hundred dollars for murdering thirteen men. Then Orchard, with his friend Johnnie Neville, started off again in their wagon, heading into Wyoming.

From Cheyenne Orchard sent a letter to Pettibone, suggesting he could use five hundred dollars. He got it and continued wandering, but split up with Neville, and he wound up broke after a gambling orgy in the town of Cody. Orchard went back to Denver. It was time to go back to work.

Married men balk at murder

In Denver, Orchard spent a good deal of time with Haywood and Pettibone. Most of the conferences had to do with a decision as to which enemy of the Western Federation should be the next to get it.

Haywood reported that they had put a fellow named Art Baston "to work on Governor Peabody" but he seemed terribly slow. Baston was a married man. "They don't seem to work so good after they get married," Haywood observed. (Orchard was married twice, but it never seemed to tie him down.) Another candidate for attention was Andy Mayberry, superintendent of the Highland Boy mine at Bingham, Utah. Mayberry had fired a hundred and fifty miners because they had taken part in a labor demonstration.

Orchard spoke up brightly to say that he was acquainted with Bingham, having once worked there as a miner, and also knew Andy Mayberry. "Well, then," Haywood said, "that's no place for *you* to go." Pettibone remarked that they had already sent Steve Adams to Wardner, Idaho, where he was "to help Jack Simpkins get rid of some claim jumpers." When that job was finished, Adams was to go to Caldwell, in the same state, "to get ex-governor Steunenberg." This apparently was the first time Orchard learned that the former chief executive of Idaho was actually on the list of persons marked for removal.

The next likely prospect discussed was Frederick W. Bradley, of the Bunker Hill & Sullivan Mining and Concentrating Company. He had been manager of that operation in 1899 when the mill was dynamited; and now, in 1904, though still an official of Bunker Hill, was also head of the mine operators' associations of Idaho and California. Orchard knew that Bradley was the only mine operator in the Coeur d'Alene district with whom the federation had been able to do nothing. All of the other operators in that region had come to recognize, at least to some degree, the unions. Not so Bradley.

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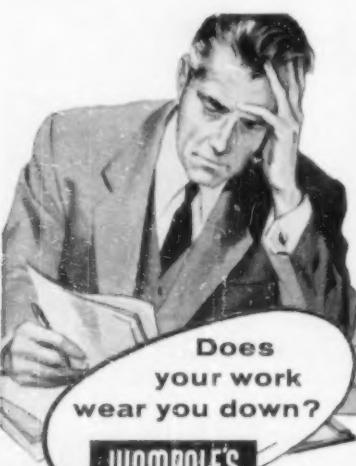
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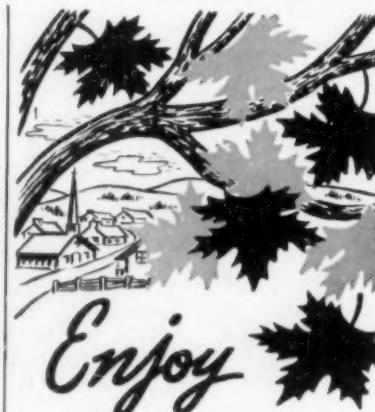
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LA PROVINCE DE
Québec

With a deft touch, he put poison in the milk, then watched the family sit down to breakfast

He was busy raising an immense fund from mine owners to drive federation men out of California and Idaho. At last Haywood asked Orchard if he could handle the job. Who, after all, had blown the Cripple Creek region apart?

Pettibone bought a ticket to San Francisco for Orchard, and gave him money. Before leaving Denver, Orchard went out to do some shopping. He bought a new black valise, packed ten sticks of dynamite in it, and got aboard a Union Pacific train for San Francisco. For the time being he was John Dempsey.

Registering at the Golden West Hotel as Dempsey, Orchard consulted the San Francisco telephone book, then called Fred Bradley's office to check his quarry. Mr. Bradley, he was informed, was out of town. He had gone to Alaska on a business trip. He was expected to return "in about three months." Orchard settled down to await his return.

October came on. Orchard read in a local paper that Mr. Fred Bradley, the prominent mining man, had returned home. He lived with his family in a big three-story residence that today would be termed an apartment house. While ranging the neighborhood, Orchard noted a room-for-rent sign on a house across the street and only a few doors from the apartment house but on a higher level. He asked the landlady, Mrs. F. E. Seward, to show him what vacant rooms she had. One of these seemed perfect for his purpose. Its windows were on a level with windows in the Bradley apartment, which was no more than a hundred feet distant. He found he "could look right into it." Orchard was elated. He engaged the room and moved in. He was now Mr. Berry.

From the two Bradley servants, Orchard learned something of the daily routine of Bradley. Almost invariably he had breakfast in time to leave the apartment for his office at eight o'clock. The time of his return varied. It might be well before six o'clock. It might be as late as ten. Orchard learned that five other families lived in the same building.

Having received from Pettibone a draft for a hundred dollars, which was "needed for preparations," Orchard bought a sawed-off shotgun. For a few nights he stood, the weapon under his coat, on the corner opposite the apartment house, waiting opportunity to shoot Bradley as he was about to enter the house. But no chance offered. He put the gun away, and looked again at those ten sticks of dynamite in his little black valise. Though he favored explosive above other means, he was still in a quandary as to how to do the job on Bradley. Some twenty-odd people used the main entrance to the apartment building every day. He didn't want to waste a bomb on just anybody.

It seems to have been characteristic of Orchard that his periods of great energy were broken by long spells of what looks to have been no more than loafing. The man was not lazy. True, he enjoyed gambling, drink and women. But not just loafing. He needed to be doing something. What did come over him at times, however, were brief periods during which he seemed unable to make up his mind what to do next.

Now, in his room on Washington Street in San Francisco, he decided on a method which he was to call so desperate and horrible that he "would gladly have let it die in my breast." At a drugstore he purchased strychnine crystals. Next

morning, in the early dark, he arose and went to a vacant house that stood just behind the apartment building. There he waited. After what seemed a long time he heard the distant clop-clop of a horse on the pavement. The sound ceased intermittently, while a delivery was made, then resumed, and moved nearer. It was still dark when the wagon came in front of the building. By then Orchard had climbed to the roof of the vacant house from where he could look down on the outside stairs which led up to the several apartments. He watched as the man placed so many bottles at this door, so many at that. When the man had gone, Orchard came quickly down to the back yard, then crept silently up to the back porch of the Bradley apartment. He noted that one bottle of milk and one of cream had been left. Removing the cap of each he sifted a generous dose of poison into the bottles, stirred the liquid, and replaced the caps with the deft touch of a man who once drove a milk wagon in Burke Canyon. Then he hurried back to his room.

No matter how horrible the means selected, which he had every reason to believe might kill not only Bradley, but also his wife and two sons little more than babies, to say nothing of two servant girls, Harry Orchard was no man to shirk his duty. He sat in his little room, and observed the Bradley family at breakfast. He saw the cook preparing the breakfast food. He saw the maid take it to the table. He watched while Mrs. Bradley helped one of the youngsters, and Mr. Bradley had his oatmeal and coffee — with cream. Yet, though he watched every move closely, nothing unusual happened.

Orchard was mystified. Had he put too little of the stuff into the bottles? Though he knew little about poisons he felt certain that he had sifted sufficient strychnine into the liquids to cause some sort of action. Possibly strychnine required a little time before it began to take effect. He didn't know. But now he saw Mr. Bradley finish his second cup of coffee and light up a cigar; saw him rise from the table, go into the hall, put on coat and hat and leave for the office, apparently as healthy as ever. In another few moments the maid was clearing away the dishes. It had been just another breakfast



Stewart Holbrook roamed the west, like Orchard, tracking the infamous career of the man who terrorized half a dozen states. These stories will be included in his book, *The Rocky Mountain Revolution*, to be published by Henry Holt, New York, and George J. McLeod, Toronto.



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at the Bradleys. Nothing had happened.

Puzzled and vaguely uneasy at the failure, Orchard walked out into the bracing salt-laden air, where little mists were moving, and went into a small barroom nearby, run by an Italian named Guibinni. He needed a drink, perhaps two. While tossing them off, something on the back bar caught his eye. It looked like a bottle of milk, and behind it was a smaller container, cream size. Making a joke of it, Orchard asked the Italian if he had added milk to his usual line of bar goods. The maid from Mr. Bradley's, Guibinni said, had come in that very morning bringing the bottles of milk and cream. Both she and the cook had tasted the milk. It was "terribly bitter." Now she wanted milk and cream from the store. She left the milkman's bottles with Guibinni, asking him to "have them analyzed." He had tasted the milk, the Italian said, and it sure was bitter as hell. "Taste it yourself," he said, proffering the bottle from the back bar. "I don't like milk," said Orchard.

The failure of the poison brought an end to the period of indecision that had dogged Orchard. Reflecting that his knowledge of chemistry, gained from the informal course under Professor Pettibone in Denver, had included nothing but explosives, he now consigned strychnine and all other such trumpery to the devils.

From the neighborhood plumber Orchard bought a twelve-inch length of lead pipe of five-inch diameter. Working happily and swiftly in the medium he understood, he fashioned a bomb containing six pounds of dynamite, to which he added sugar, potash, and caps. It was to be a set bomb, and its mechanism was thus: a cord attached to the cork of a small vial would, when pulled, release acid to flow through a hole in the pipe to the caps inside. Detonation would result.

"While making the bomb in my room," Orchard related, "I tested it to make sure the cork would come out of the bottle without moving the bomb itself. I flattened the pipe into an oblong shape and packed it with the dynamite, but did not put in the caps. I fastened an empty vial in place. I drilled a hole. Then I put the whole thing on the floor of my room, attached one end of a cord to the bottle stopper, the other end to a screw eye in the door of my closet. Then I pushed the door shut to pull the cork from the vial. It worked fine. This would cause the same action as closing the door of my closet."

Orchard was familiar with the morning routine of Bradley. Now he sought to make certain that the mining engineer would not be away on some trip or other. From a downtown telephone he called Bradley at his home. Saying he had come in from Goldfield, Nevada, just then undergoing a wild rush of prospectors, he asked if Bradley would be interested in some good mining property there. Bradley was interested. He suggested that Orchard come to his office next morning at nine o'clock.

Late that night Orchard went to the apartment building, walked up one flight, and fastened a screw eye in the Bradleys' door, then returned to his roominghouse, where he carefully wrapped the bomb in store-type paper and tied it with store-type string.

The next thing was to lay plans for a smooth getaway. Telling his landlady that he was going away for a brief trip, he paid her the rent. He hid the neat package on a shelf in the closet, then took his valise downtown to check it in a saloon. He returned to his room, to catnap while the night hours passed, slowly enough.



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SHE COMPLIMENTS HER
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SINCE 1910 — CANADA'S FINEST LAGER

Orchard was up to watch the Bradleys at breakfast. When Bradley started on his second cup of coffee, Orchard went down to the street, crossed over, and walked into the apartment building as if he owned it. Then came the ticklish moment when he had to place the bomb on the mat just outside the Bradley door, and attach the cord to the screw eye he had already fastened in the door.

All now was in place, waiting for Bradley to finish his second cup, light his cigar, and leave for the office. Orchard emerged from the building and got

aboard a streetcar for downtown. Less than five minutes later, Bradley lighted his cigar, put on his coat and hat, and went out the door. Just then the bomb let go.

Six pounds of No. 1 gelatine, confined in a casing of lead pipe, wreaked havoc with the front of the building. The entire front stairs was blown out onto the street. Bradley went with it, falling to the sidewalk amid shattered timbers and broken glass.

Next day Orchard was elated to read the San Francisco Call's account, which

began with the statement that "an explosion of gas" wrecked the building, and went on to say, "F. W. Bradley was the innocent cause of it" when in the hall "he scratched a match to light his cigar." The city fire marshal, who had "made a careful inspection," was of the opinion that "gas escaping from a grate in the apartment of M. E. Cummings, San Francisco park commissioner, had furnished the explosive material." No trace of the bomb apparatus was mentioned. Orchard sent a copy of the Call to federation headquarters in Denver. Almost at once

he received three hundred dollars — by postal telegraph.

It was time to return to headquarters where, so Orchard thought, he would be welcomed as befitting a hatchet man who could blow up a building, maim a union enemy and see the whole thing charged to a gas-utilities company. Pretty fine work. He arrived without incident in Denver, got a room in a lodginghouse not far from George Pettibone's home and store, then phoned the Western Federation's unofficial chemist that he was back from the front.

With Pettibone when he came to call on Orchard was Steve Adams. Pettibone let his two hatchet men know that things in Colorado were going far from well for the unions. The mine owners had just reported that thirty-five hundred non-union men were working in the Cripple Creek mines, adding that of these more than two thousand had been members of the Western Federation.

Then Haywood asked them to come to his house. Big Bill mentioned four likely prospects. There were Chief Justice William H. Gabbert of the Colorado Supreme Court, who "had decided against federation president Moyer in a *habeas corpus* case," Justice Luther M. Goddard of the same court, "who had written the opinion against Moyer," Frank Hearne, manager of the Colorado Fuel & Iron Company, a recent importation from Pennsylvania, where he had won recognition among employers as a man to ride roughshod over "anarchistic unionists," and Governor James H. Peabody, who had once declared the Cripple Creek region to be in a state of insurrection and sent militia to police the district.

It seems to have been suggested either by Haywood or Pettibone that Orchard and Adams team up for the purpose of killing the four men selected. They had run down Lyte Gregory, the mine dick, and killed him on the street. Adams had killed a mine superintendent and, more recently, a couple of claim jumpers. Orchard had dynamited Bradley, and blown two mine bosses to bits. Neither thug had revealed anything that could be called a twinge of conscience.

Pettibone told them to go after Governor Peabody. But they failed on this assignment and when headquarters observed that Adams was drinking hard he was taken off the job. Orchard was told to switch his attentions to Judge Gabbert. Pettibone said he would lend a hand. The two men made a bomb from a molasses can. Pettibone had previously cased Gabbert's routine.

It was a day when great men still walked to and from their offices, and it was Chief Justice Gabbert's pleasure to walk from his home to the Supreme Court in the capitol buildings. The route brought him down Denver's Emerson Street to Colfax Avenue. At the junction of those thoroughfares was a vacant lot. Across this lot was a footpath which it was Gabbert's custom to follow. Working at night, Orchard and Pettibone dug a hole beside the path, buried the bomb, and covered it neatly with grass sod.

Next morning the two men observed that the vacant lot looked just as they had left it. Pettibone took his post where he could see the judge when he left his residence. Orchard stationed himself near the lot where the bomb lay waiting. Pettibone was to signal when the judge started. Orchard was then to take a lady's purse he had bought, go to the lot, lay the purse fair in the path, then hitch it to the fine wire in the grass that led to the bomb.

Pettibone gave the signal. Orchard started for the lot, but stopped when he saw another man pass the approaching



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judge and head for the lot. By the time the stranger passed the spot, the judge was too near to let Orchard attach the purse without being detected. Three more attempts on as many mornings were frustrated because other strangers appeared on the scene almost simultaneously with the judge. Orchard came to think the vacant lot at the corner of Emerson Street and Colfax Avenue was jinxed. And so it was.

Pettibone now had to leave for the federation convention in Salt Lake City, but not before he had told Orchard to let nothing interfere with the dynamiting of Judge Gabbert. Pettibone obviously meant it as a warning.

Left alone to carry out the Gabbert job, Orchard went again to the vacant lot to consider the still-waiting bomb. "I was afraid to touch it after it had stood so long," he said later. "I knew that the little windlass swung very easily. The least touch of the wire was sure to tip the bottle of acid." In such case, he thought that in hooking the purse to the wire, and doubtless in some haste, that—well, he decided the thing to do was to make and plant a second bomb.

Orchard went to work on another bomb for Justice Gabbert. It was to be something of a new departure. In Pettibone's basement, standing silent and dusty on a shelf, he had noticed several old eight-day kitchen clocks. Orchard removed the mainspring from one of these to see if it was strong enough to break one of the vials he used for acid. It was. He went ahead to make the bomb, the clock spring bent back and held by a piece of stiff wire that would be released by a casual pull of the wire—if and when Justice Gabbert reached for the purse. That night Orchard strapped the bomb under his coat, got on a bicycle he found in the cellar, and rode out to the vacant lot, where he planted the second bomb "as close to the first as I dared."

A bomb waited for the judge

Riding the bike again next morning, Orchard was on the scene in good time. When he saw Judge Gabbert come out and start down the steps of his home, he rode ahead to the lot, attached the purse, then rode swiftly away. He was not there to see what happened.

Just as Judge Gabbert was approaching the corner of Colfax and Emerson, a friend hailed him. The judge paused. The friend came up. The two men talked a moment, then walked, still talking, not across the vacant lot, but around it. That was why Orchard, by that time several blocks away, heard no welcome sound.

The vacant lot waited, the enticing purse on the ground. Approximately fifty minutes after Judge Gabbert had taken the tack that led him around the lot, a good citizen of Denver, Merritt W. Walley, came along Colfax Avenue. He turned into the footpath across the lot to Emerson Street. He saw the purse. He stooped to pick it up.

A total of twenty pounds of dynamite, in the two bombs side by side, blasted a mighty hole in the ground, and fairly tore poor Merritt Walley apart.

Harry Orchard heard the noise but had to wait for the papers to learn what had happened. He was "disappointed" that the victim was a man he had never heard of. ★

The story of Harry Orchard's most heinous assignment—the cold-blooded murder of ex-governor Frank Steunenberg of Idaho—will appear in the next issue of Maclean's, along with its history-making aftermath of court trials.



Karsh visits Hollywood continued from page 14

Lauren Bacall lacked in slacks but stood the test in slim jims

Karsh hastens to make plain "go out on a limb and say these are the Most Beautiful Women in the World. These are simply some girls (a) who appealed to me (b) who were available (c) whom I had time to photograph during my stay."

Stars, starlets and studios were enchanted to co-operate. RKO and Paramount lent props, gowns and working space when required. On request, Lauren Bacall ransacked her wardrobe for "something with more color" than

black slacks and a blue shirt. (She came up with slim jims in shades of blue and orchid, page 18.) Marisa Pavan, the young Italian actress featured in *Rose Tattoo*, made time for a sitting a scant forty-eight hours before her marriage to

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CHG-EX



The star who shined through a shiner

Jeanne Crain managed a blacked-eye smile for Karsh after a fight with her husband. Make-up hid the shiner, a court ended the marriage.

Jean-Pierre Aumont, the French matinee idol; Jeanne Crain kept her appointment a scant eight hours after being involved in an argument with her estranged and since-divorced spouse, manufacturer Paul Brinkman. Heavy make-up concealed a black eye. For Karsh, Ann Blyth stood in her living room and sang selections from *Kismet*, the film musical in which she stars. Joan Collins, an English starlet, obliged Karsh by slipping down a pink strap because he said it would make her shoulders look "even more inviting." Debra Paget, an American starlet, removed her contact lenses and asked Karsh to call her Debbie. And Art Arthur, executive assistant to the great de Mille, opened doors to him.

But to judge by Karsh's own accounts of the spree, none of these accommodations nourished his soul so much as photographing Anita Ekberg, the Swedish starlet who's being hailed as "the new Ingrid Bergman."

When Miss Ekberg first strode into her living room clad in a sleeveless turtle-neck sweater, her own agent whistled nervelessly, Karsh's assistant was so unmanned that he forgot to remove the first slide from the camera before the next shot, resulting in a double exposure; and though Karsh himself asked her to sing, while she posed, in order to capture something he calls "her lust for living," he remains vague about what she actually sang. "She's the perfect picture of an earth goddess," he defends himself. "She's so lush she looks edible." He posed her, suitably, beside a bowl of ripe fruits (page 16).

Miss Ekberg nibbled at the fruit; she also nibbled at a smorgasbord spread on a nearby table and drank quantities of vodka. Karsh, who admits it's possible

to have too much of a good thing, says darkly, "She must watch her diet. Already her bust is thirty-seven inches."

Such problems aside, Karsh considers Hollywood actresses the easiest camera subjects in the world. "Take Lauren Bacall," he expands. "At the slightest hint of what I wanted she would swing a hip one way, then the other; every movement suggested a picture."

"This," he adds impressively, "is not Mrs. Brown, two hundred and sixty pounds, who hates 'having my picture taken.'"

Karsh's hints to Miss Bacall went approximately this way: "As you look at the camera, force them to think . . ." or, "Now I want a picture when they look at this they will melt."

With all this going on, Karsh reports they also talked about: Adlai Stevenson ("She's a great admirer"); Pandit Nehru ("She adores him"); modern art ("She likes abstracts"); and the state of her husband's health. Miss Bacall is married to tough-guy actor Humphrey Bogart who had just come out of hospital. Bogart wandered in in his bathrobe for a while to watch proceedings and renew an earlier acquaintance with Karsh. Everyone discussed the Bogarts' magnificent new mansion, complete with swimming pool. Their former home had been a perch on the side of a mountain and Bogart observed, "No wonder we left: it was full of rattlesnakes." The sitting took three hours.

Karsh's sitting with Joan Collins took about two hours. Miss Collins, a recent English import, was one of the candidates he'd found in a movie magazine and, like the others, she was picked because of what Karsh calls "general deportment." He defines this as "bone con-

struction plus the way they fix their hair . . . tilt their head . . . carry themselves . . . throw themselves toward the camera." In Miss Collins' case these various factors were photographed in pink against a pink background (page 19) and she threw herself toward the camera with such ardor that a pink shoulder strap slipped down. Karsh had her leave it there. Her naturally black hair was fixed with artificial black bangs.

Debra Paget, another young starlet of suitable deportment, turned up for her sitting accompanied by her mama, a mountainous woman whom everyone on the lot calls "Mom" and who is never seen without an all-enveloping coat. "I'm so enormous," she told Mme. Karsh comfortably, "I always wear it. I know I look like Omar's tent." Karsh describes her daughter, on the other hand, as "undoubtedly a very fine figure." He furthermore says she was a sweet youngster who was thrilled at the honor of being asked to pose and squirmed around "like a lovely little kitten" before bursting out, "Please call me Debbie."

Miss Paget is starred in *The Ten Commandments*, the latest chapter of de Mille's revised version of the Old Testament. (Its cost is reported to be a million dollars per commandment.) In the film she wears a dark wig, brown contact lenses and a gown Karsh describes as "a sheath she hardly fits into"; for his portrait Karsh had her remove the lenses to reveal the blue Paget eyes and the Egyptian trappings to reveal the true Paget proportions.

In contrast to Miss Paget's *déshabillé*, Miss Carol Channing was dressed up for her portrait. Miss Channing, most widely known as the wide-eyed, rubber-faced star of the Broadway musical, *Gentlemen Prefer Blondes*, was not originally on

Karsh's list. But he met her at a cocktail party, liked her deportment and instantly said to her, "I would like to photograph you." Carol said, "How?"

Karsh gave it thought and phoned her at midnight. "I've got it," he said with nocturnal gusto. His inspiration was her own hit song, *Diamonds Are a Girl's Best Friend*, and he suggested "an extravagant picture, just oozing opulence . . . an elaborate headdress . . . rings . . . a glass of champagne which I, myself, will supply . . ."

Miss Channing considered, and told him the next day she'd go along with everything but the champagne. "My father's a Christian Scientist," she said, "and I wouldn't want to hurt his feelings."

Karsh settled for an ornate goblet. He borrowed it—and other less ambiguous props—from RKO, darkened the windows of Miss Channing's apartment with bedclothes, sang *Diamonds* to her off-key to kindle a lively expression on her face—and got his picture (page 18).

When Karsh had earlier seen elfin Audrey Hepburn in the Broadway production of *Ondine* he'd been curious to know what she was like in private. He found her personality "bright, driving, moody, emotionally charged," and her charm "more spiritual than physical." Miss Hepburn posed for him at Paramount, where she was at work with Fred Astaire on *Funny Face*, the film biography of fashion photographer Richard Avedon. She wore the same heavy-satin hooded mantle she wears in the film. He was impressed with her voice—"flexible and soft"—her bone structure, the matte skin that betrays her mixed blood and the fact that she was the only actress who posed with no make-

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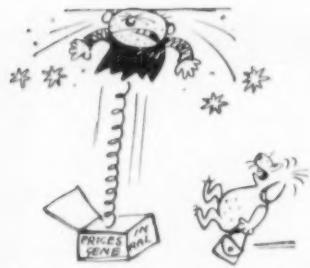
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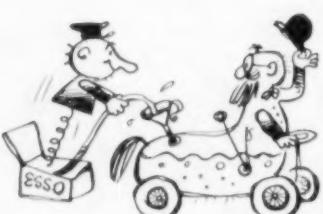
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up but lipstick and a stroke of eyebrow pencil.

But he was most impressed with her hours of work. "She has to get up at five. She works till six, then has to remove her make-up and costume and make the two hours' drive back home." He adds, "Hollywood actresses work hard."

He thinks this explains why, when her bridegroom, Mel Ferrer, arrived near the end of the sitting, she virtually ignored Karsh in favor of greedy private talk with him. "Her work leaves her so little time to spend with her husband," Karsh consoles himself.

Photographing Anne Baxter reinforced Karsh's admiration for the Hollywood actress' hard work. The sitting had to be scheduled for nine o'clock at night, after her day's work at the studio, and she told Karsh she had to be up the next morning again at five.

Miss Baxter also reinforced his admiration for the new Hollywood IQ. "The quality of intellect in Hollywood actresses has certainly risen," he claims. He points out, for instance, that Miss Baxter, who is the granddaughter of architect Frank Lloyd Wright, conversed with him about Sartre, Gide and Malraux, and was familiar with Karsh's work.

Karsh attributes the new culture to the fact that most actresses now free-lance. "Without a long-term contract," he points out, "they have to be versatile. They must have a certain amount of education and a serious approach to their work."

Some further Karsh observations:

- On Hollywood marriages: "They're like restaurants: you go one trip and everything is superb; you go back three months later and they're under new management."

- On Hollywood packaging: "There are many beautiful girls in Canada and the States. The Hollywood girls stand out only because of their presentation. They understand proper grooming . . . they pick the right clothes . . . they can do miracles with make-up . . . they know how to use their bodies."

"They love to be photographed," he says in summary. "I like to photograph them."

"Some day," he continues wistfully, "I'll go on a real binge and photograph nothing but beautiful women."

In the meantime he's already decided to do some kind of book that can include Gina Lollobrigida, the Italian film beauty. "She," he says simply, "is perfection personified." ★



London Letter continued from page 6

young man when she was a mere sixteen. Unlike the eminent baseball player, Mr. Miller is an intellectual. He has a mordant wit and a sardonic philosophy. His mind moves on the path of resentment, for he does not suffer fools gladly.

But London was as uninterested in him as it would have been in Mr. DiMaggio—probably more so because the English have a deep respect for men who succeed in sport.

The climax of Miss Monroe's visit was when Terence Rattigan, the youngish handsome author of *The Sleeping Prince*, decided to throw a great party at his splendid Georgian country house in the heart of Berkshire, some twenty miles from London.

Sir Laurence was co-host with him and of course Vivien Leigh was there.

That supreme actor of the English stage, Sir John Gielgud, was present at the party in all his classical melancholy. He seldom smiles yet his greatest success on the stage was in Oscar Wilde's humorous masterpiece, *The Importance of Being Earnest*. For a time it seemed that his career was finished and that he would walk the rest of his days in darkness and in shame, but his gifts saved him from that fate.

Now let us look at our host. Terence Rattigan, like Dorian Gray, shows no sign of the passing years. He has written romantic comedies that have brought him the reward of laughter and wealth, but he seldom smiles.

As the son of a diplomat he was intended to follow in his father's steps but the stage absorbed him instead. When the Hitler war came he was asked by the authorities to help arrange entertainment for the troops, but instead he became an air-gunner in the air force. Night after night he flew in the attacks over Germany and refused to be grounded.

Unlike most authors and all journalists, he dresses like a tailor's model. If he had a collision with an omnibus it

would be the bus that would emerge disheveled.

The only one who rivaled him for quiet elegance at the party was Douglas Fairbanks who would be automatically Sir Douglas if he would exchange his American citizenship for British. The honor was bestowed on him in principle, and deservedly so, but he chooses to remain an American — in fact, almost "The American" in London.

But what was our heroine doing all the time at the party? Marilyn danced with three partners only—her husband, then her hairdresser (Sidney Guillardoff) and finally her host. Since we are recording history to be read a hundred years from now (perhaps), it should be put on record that Miss Monroe danced a second time with her husband to the tune of *Embraceable You*.

"No damage at all"

At four o'clock, as a lovely summer's morning was waiting to spread its largesse upon the awakening earth, the party broke up. Vivien Leigh had two performances to play that day and thought it time to depart.

As all dramas must have a final line to bring down the curtain, let us quote the verdict of the host: "It was such a friendly party. There was no damage at all."

By an odd coincidence there was a rival attraction to all these activities, sponsored by the man who discovered Miss Monroe and gave her a first chance in Hollywood. I refer to Ben Lyon, who married the famous Bebe Daniels. They have lived in London for the last quarter of a century. Their daughter Barbara was married to her television producer on the Saturday of the week preceding the party for Miss Monroe.

Ben Lyon is the most modest of men, a pilot in the First World War, yet as gentle as a lamb. Somehow he got a job

as a young man with one of the great producing studios in Hollywood as a sort of talent scout. No one paid any attention to him, which, he admits, was fortunate because they would have fired him if they had known he was still there.

But one day there came to his office a frightened girl whose real name was certainly not yet Marilyn Monroe but who was the heroine of our tale. She had no experience of acting; in fact, she had no experience of anything. She was just film-struck.

Ben told me the story one night of how he talked to her on that first momentous meeting and, greatly daring, he decided to give her a screen test. It was hard to say which of them was the more nervous because Hollywood was in a cautious mood and preferred the established stars even if they were waning before their eyes.

"She looked so small and helpless," said Ben. "I just couldn't tell her to go. Somehow I got the studio to give her a screen test but no one bothered to look at it. Yet she stayed on in Hollywood and suddenly got an offer from another studio. I guess some soft-hearted guy fell for her, like me."

Whereupon Ben's company put her on the payroll and eventually the path of glory was open to her.

It must have seemed like a jest of the Sardonic Satirist that at the reception following Barbara Lyon's wedding the question which the guests asked of Ben *ad nauseam* was: "Is Marilyn Monroe coming?" At any rate Marilyn did not come and we had to hide our disappointment according to our temperaments.

Strangely enough I heard that question more than once at the Buckingham Palace garden party to which, among others, MPs and their wives are invited on a rotation basis. "Will Marilyn Monroe be here?" But it was not to be. Personally I am glad, because the crowd would either have surrounded her or else ignored her, and both would have been painful.

But the fates are not finished with the heroine of our tale. Even before she was married her husband had been called to testify in New York before the U.S. House Committee on Un-American Activities. It was alleged that, like so many intellectuals in New York, he had dallied with the Communists. Later, because he wouldn't reveal certain names, the committee cited him for contempt.

At the time of writing he is here in London, but I suppose that he will leave very soon to face the ordeal of the grand inquisition.

A philosopher once said that people go to the theatre to escape for a few hours from the drama of real life. It may well be that Marilyn Monroe will find escape in the filming of *The Sleeping Prince* from the grim drama of her husband facing a tribunal that has charged him as an enemy of the American way of life.

Perhaps it would have been better if she had not parted from her baseball husband. Joe DiMaggio might have felt ill at ease in the presence of Olivier, Gielgud, Rattigan and Fairbanks, but when the party ended his rugged normality might have been a comfort to the little creature for whom there is no privacy, no home life and no anonymity.

Suddenly Miss Monroe has ceased to be news. With the fickleness of the mob a new hero has replaced her. A handsome young curate playing in a test match against the Australians at Old Trafford, Manchester, has scored a century.

Long live the curate! Long live cricket! The English have turned from the goddess of the films and returned to the god of sport. ★

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55M-22

Fowler must help find the money the CBC needs to carry on national broadcasting. The questions are:



Investigator Fowler gets poles-apart views on Canadian TV from CBC chairman A. D. Dunton (left) and T. J. Allard, spokesman for the private broadcasters.



Family man Fowler relaxes with his wife and baby Robin, Bobby, Diana, Bruce and Phillip on the beach of their summer home on Quebec's Lake Memphremagog.

duce better—and worse—television programs. They've heard the CBC lauded as "the greatest cultural institution in Canada" and private radio stations lambasted as "glorified jukeboxes for American records." A private television spokesman, Roy Ward Dickson, has written Fowler that, "In Canadian BROADCASTING there IS NO DEMOCRACY: ONLY AUTOCRACY!" while on the other hand a private radio manager, Finlay MacDonald, has said frankly that, "The CBC has discharged its duties very fairly."

From the great broadcasting controversy has come a subsidiary ruckus over Robert Fowler's part in it. Since the commission's hearings began, amid contrary speculation on its collective views, the chairman has been singled out for attacks by several labor unions for favoring private stations, and by the Toronto Globe and Mail for "showing a marked tenderness toward the CBC."

The object of these paradoxical allegations loses no sleep over them. If anything, Fowler feels that the image of himself in cahoots with both sides is an eloquent—if left-handed—tribute to his judicial impartiality. "Until all the evidence is in," he says, "I don't intend to make up my mind about anything."

What seems to dispute this claim, at least partly, is Fowler's way of eliciting evidence. A born lawyer, he loves to argue; and he will argue that he argues for more than the sweet sake of argument. He believes that "there is nothing like a brisk but orderly debate for getting at the facts."

Fowler's approach was sharply demonstrated in Ottawa last May while T. J. Allard, of the Canadian Association of Radio and Television Broadcasters, was testifying on behalf of one hundred and forty-one private radio and twenty-five TV stations. When Allard held that the CBC should be stripped of its powers over private stations, Fowler listened intently, nodding his head as if he couldn't agree more. But when Allard hinted that some private-station owners were afraid to tell all about the CBC's "tyranny," lest they lose their licenses, the chairman quickly began firing pointed questions. Did Allard know of any licenses being revoked, for any reason? No, not in recent years. Had any stations openly criticized the CBC in that time? Well, yes. Pressed for examples of how the CBC abused its powers, Allard could cite none.

And when he declared that private stations should be allowed to form their own networks, Fowler drew from him the admission that the CBC had never refused this—possibly because they'd never asked.

"Are we discussing practice or just a lot of theory?" Fowler demanded. "When you said, 'We want to be free,' I assumed you were not free." Summing it up, the Toronto Telegram reported, "The Fowler Commission made mincemeat of the private broadcasters."

Yet twenty-four hours later Fowler appeared to be grinding away, with equal vigor, at the CBC. When officials of the Canadian Labor Congress upheld the CBC's right to regulate private stations, he objected. "Doesn't it seem wrong in principle," he observed, "that the CBC should both compete in broadcasting and act as referee? Wouldn't it be fairer to have some independent board of con-

trol?"—the very idea Allard advanced and Fowler had seemed to reject the day before.

While Fowler's technique of pitting one argument against the other tends to reveal and, in balance, to hide his personal views, if any, he finds it an effective device for prodding witnesses. "It's not enough to know what people think," he has explained. "We've also got to find out why."

Fowler's attitude of total skepticism is evidently contagious. Ron Fraser, the CBC's director of press and information services, had followed the commission for two weeks when he told Fowler, "You've changed my whole outlook on life."

"How is that?" the chairman asked. "Well," said Fraser, "the valet came into my hotel room today before I got up. He said, 'Good morning, sir.' And I said, 'Yeah? Prove it!'"

Proof aside, most of the Fowler Commission's thinking is directed in a purely speculative way at some big and controversial "ifs" about broadcasting. If, for example, television should be thrown open to competition, as the commission can recommend, what will be the result? To CBC chairman A. D. Dunton, the loss of its monopoly in major cities "at this time" would reduce the CBC's revenues and slow down its avowed development of a national TV system similar to radio's.

"What do you mean by better?"

On the other hand, the Canadian Association of Radio and Television Broadcasters has maintained that, according to a recent Gallup Poll, 77.8 percent of the nation's viewers are dissatisfied with one-channel TV and that competition would give them a welcome choice of programs. Speaking for the Association of Canadian Advertisers, Toronto lawyer Peter Wright told the Fowler Commission that there is enough advertising money available in such cities as Toronto, Montreal, Vancouver and Winnipeg to support at least two TV stations. "Competition won't hurt the CBC," he predicted. "But it will produce better programs, better talent and better broadcasting."

"What do you mean by 'better' programs?" said Fowler. Wright replied, "Programs that would cost less and appeal more widely."

The implication that a program appealing to the most is therefore the best in TV doesn't sit well with Fowler. "I yield to no man in my admiration of competition in the development of trade and goods," he has said. "But I question whether it necessarily applies in the field of communications. For example, competition in horror comic books doesn't produce 'better' comics—just more horrible ones."

In their consideration of competitive TV, the commissioners are well aware of one of the most powerful forces influencing the Canadian way of life: namely, the American way of life. Fowler's personal views on the subject are well known. "Canadian broadcasting," he has said, "should do a great deal to reflect the culture of Canada." On several occasions both he and James Stewart have cited the Massey Report's indictment of private radio for failing to originate Canadian material, and they have voiced fears that

how much money and who will be asked to pay it?

private TV stations in competition with the CBC would do little more. But beyond stating a conviction that Canadian broadcasting should have the flavor of Canada, the commissioners haven't yet indicated how they propose to guarantee it.

Just as the Fowler Commission may help to shape what the Canadian viewer will see on his TV screen, so it can touch him in the pocketbook. One of the commissioners' biggest chores is to find out how much money the CBC needs to carry on national broadcasting, and then to find the money. They've been told that the CBC requires roughly thirty million dollars a year to continue its present level of television service, plus another sixteen million for radio. The CBC's problem is that its expenses are increasing and its largest source of revenue—a fifteen-percent excise tax on TV sets and radios—is shrinking, now that the rush of first-time television purchases is over. A twenty-million-dollar deficit has been forecast for this fiscal year, unless TV services are cut drastically or the government comes through with help. Fowler's appraisal of the situation is a safe one: "There has to be some change in financing."

If the commissioners have come close to tipping their hands on any of the issues, this is it. They seem to agree with both the CBC and the Massey Report of 1951 that a direct levy (license fees on

home receivers) would be the most practical system, even though it proved politically so unpopular with radio listeners that Ottawa abolished it in 1953. When the commission was in Toronto the Association of Canadian Advertisers came up with an alternative suggestion that it would profit the CBC to sell more air time to advertisers. "If people don't want license fees," said the ACA spokesman, Peter Wright, "they can pay for television simply by watching—and heeding—the sponsors' commercials. That's the price." To Fowler the price seemed too stiff. He replied dryly, "Doesn't that fall under the heading of cruel and unnatural punishment?"

When the final briefs, opinions and arguments are on the record, later this month in Ottawa, Fowler and his associates will still have to pore over involved reports on the state of CBC finances, surveys and radio and television programs from coast to coast and more than a hundred and fifty private letters urging them to make sure that Canadian broadcasting shuns liquor advertising and Mr. Elvis Presley; that TV helps to develop Canadian opera singers and junior hockey players; and that radio devotes more time to classical music—"Because," as a farm wife in northern British Columbia put it, "it's so nice to be able to listen to Bach and churn the butter."

When all the evidence is in, Fowler hopes the commission will be able to pro-



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"I'm a long-hair," says commissioner Turcotte. "But, strangely enough, I also enjoy *I Love Lucy*"

duce its report by the end of this year, or early in 1957. It will contain recommendations on which at least two commissioners are able to agree, but each man is free to write an individual minority report on disputed points.

Judging by the disparity of opinions presented to the royal commission, the odds are long against any three Canadians reaching exactly the same conclusions about broadcasting. Several months ago, in the diner of a train crossing the prairies, the three commissioners were hashing over the latest brief in support of competitive TV—when an eavesdropper overheard these appraisals:

Edmond Turcotte: "Well, it's the same old story over again."

James Stewart: "Not quite. More like variations on a theme."

Robert Fowler: "Oh, I don't know. If you get hit over the head often enough it makes you think."

Their backgrounds and tastes are equally dissimilar. Edmond Turcotte, a perfectly bilingual French Canadian, was born fifty-eight years ago in Lowell, Mass., but made his mark as a newspaperman in Quebec. From 1934 to 1937 he edited the Montreal daily *Le Canada*, then the official French-language organ of the Liberal Party. For several years thereafter he held a variety of administrative posts with the City of Montreal and has since been given a succession of federal-government appointments. In 1942 he was assigned to the Wartime Prices and Trade Board to organize the French service of its information branch. He represented Canada at UNESCO conferences in London, in 1945, and in Paris a year later.

"L'Affaire Turcotte"

In 1947 he was named Canadian consul-general to Chicago, thereby touching off what international headlines dubbed "L'Affaire Turcotte." The Chicago Tribune charged that Turcotte was *persona non grata* because, two years earlier, he had written an article warning that French-Canadian culture must beware of "the vulgarity and tawdriness of America." Ray Atherton, U.S. ambassador to Ottawa, protested the appointment of this "anti-American" to Chicago. The government, however, stuck by its new diplomat. He remained in Chicago for three years, without further incident, spent another three as consul-general in Caracas, Venezuela, and then went to Colombia, in 1953, as a full-fledged ambassador. He returned to Canada last year and, between postings, was assigned to serve with Fowler on the Royal Commission on Broadcasting.

Small, bright-eyed and bald, Turcotte unabashedly describes himself as "a confirmed long-hair." He is keenly interested in the arts, yet practices none. His reading runs to heavy nonfiction, mostly history and sociology. He spends long hours listening to recorded symphonies and opera, detests modern music in any form but confesses to "a morbid curiosity" about the current craze for rock 'n' roll. Since his appointment to the Fowler Commission, Turcotte has installed a TV set in the downtown Montreal apartment where he lives with his wife, daughter and two sons. "I prefer the more serious programs," he says, "—good plays and documentaries. But, strangely enough, I also find myself enjoying light stuff, like *I Love Lucy*."

While Turcotte's life has taken many turns, James Stewart's entire career in

finance has had only one direction—up. Born in Perth, Scotland, sixty-two years ago, he quit school at the age of fourteen and went to work as a ledger keeper. Six years later, in 1914, he came to Canada and got a job with the Canadian Bank of Commerce. Working in Halifax, New York, Mexico City and Toronto, Stewart won rapid promotions. During World War II he was loaned to the federal gov-

ernment, going to Ottawa as administrator of services for the Wartime Prices and Trade Board.

In 1947 he became general manager of the bank and, five years later, moved behind the president's desk in Toronto. Last year Stewart was among the prominent Canadian businessmen—Fowler was another—who appeared before the Royal Commission on Canada's Economic Pros-

pects to protest against federal anti-combines laws on grounds that "a simple agreement among two, three or more businesses is regarded as a criminal offense, regardless of whether it is beneficial or harmful to the public." On his record, Stewart is a sound and astute conservative who won't advocate any changes in broadcasting that don't add up to good financial sense.

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A bachelor, Stewart is a handsome grey-haired man who looks younger than he is. He curls, shoots golf in the mid-70s and spends a month each winter deep-sea fishing off Panama or Peru. His home on the northwestern outskirts of Toronto is a large grey-stone house fashioned after an early French-Canadian manor. Stewart gives much of his spare time to reading, chiefly to historical novels and books on economics. He seldom listens to radio except for news reports but greatly enjoys watching baseball, football and boxing on his seventeen-inch TV set. Being

a director of Maple Leaf Gardens, he gets his hockey firsthand.

The best-known member of the commission, Robert Fowler, was born in Peterborough, Ont., where his father was a manufacturers' agent. Graduated from high school at eighteen, he went to the University of Toronto on a scholarship, intending to become an actuary. In 1928 young Fowler got his degree in mathematics but, having cooled on the actuarial profession, he enrolled at Osgoode Hall to study law. Admitted to the bar in 1931, he joined a leading Toronto law firm and

three years later married Sheila Ramsay, the beautiful daughter of a socially prominent Toronto family.

Fowler quickly established himself as a lawyer—at thirty-one he was one of the youngest Canadians to plead a case alone before the Privy Council in London—and as a tireless worker on behalf of Liberalism. In 1937, when the Royal Commission began an important review of dominion-provincial relations, he was made legal secretary to the chairman, Ontario's Chief Justice Newton W. Rowell. He impressed the commissioners

with his quick grasp of the complicated constitutional issues involved and was later given a large hand in drafting their report, which ultimately brought about a major redistribution of governmental authority and tax powers.

In 1942 Fowler was back in the now-familiar role of investigator, as a government counsel in an enquiry to find out why Canadian troops were sent to Hong Kong shortly before its certain capture by the Japanese. This done, he was called to Ottawa to become secretary of the Wartime Prices and Trade Board, that mobilization of civil servants, high-powered businessmen and lawyers whose job was masterminding the home front.

One of Fowler's jobs was to help increase the supply of wood products, which kept him in constant touch with leaders of the pulp-and-paper industry. As a result, when the war ended and they faced the problem of getting unwound from government controls, the man they looked to for assistance was Fowler, who'd helped to do the winding. Thus he moved to Montreal as president of the Canadian Pulp and Paper Association and chief spokesman for the trade.

Many times, in this capacity, Fowler has gone before the American Newspaper Publishers Association or U.S. congressional committees to defend the Canadian newsprint industry—which sells eighty percent of its production in the States—against charges of price-rigging. He has frequently been called upon to rebut similar accusations in Canada. In 1951, when seven fine-paper companies were charged with fixing prices, Fowler contended that Canada's antitrust laws were unfair to businessmen—"You can compete," he interpreted, "but you mustn't win the competition"—and he publicly criticized Minister of Justice Stuart Garson for importing legal concepts from the United States. Yet less than a year later, when the cold and Korean wars prompted Ottawa to reimpose "essential material" controls on the pulp-and-paper industry, C. D. Howe asked Fowler to administer them within his new Department of Defense Production. Though it meant a lot of extra work, he accepted the non-paying job promptly.

"All-or-nothing guy"

"I don't think businessmen can criticize government," he says, "and then refuse when they're asked to do something to help."

For this reason—certainly not because of any scorching interest in broadcasting—Fowler agreed to become chairman of the royal commission when Prime Minister St. Laurent tapped him for the job last winter. Though the public hearings were still months off, he lost no time starting work. In the middle of a European vacation with his wife, he took several days off to call on TV executives in Paris and London and establish contacts that have since produced some interesting comparison reports on French and British broadcasting systems. Mrs. Fowler took the holiday interruptions with calm resignation. "When Bob gets interested in something," she says, "there's no stopping him. He's an all-or-nothing guy."

Fowler's interests cover a wide range. An avid reader, his bookshelves contain the assorted works of William Shakespeare, Mickey Spillane and Stephen Leacock. Like Turcotte, he is fond of symphonic music but, unlike him, he also likes jazz, particularly the Dixieland style of Mr. Satchmo Armstrong.

Several years ago Fowler became interested in art. Not content merely to have the paintings of such well-known Canadian artists as A. J. Casson, Robert

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While Winnipeg ignores the CBC, said witnesses, Regina wants it. "You can't win," sighs Fowler

Pilot, Lorne Bouchard and Eric Riordon adorning his home—a splendid eleven-story brick house overlooking Montreal—he began daubing at landscapes himself. Fowler calls himself a "primitive"—"it's the best word for my own work." He also plays piano, writes slightly purple doggerel for the private amusement of his friends and takes an active part in the Canadian Institute of International Affairs, of which he was president for five years. "Bob has a general curiosity about everything," says Edmond Turcotte. "If you're talking baseball or ballet, he has endless questions to ask."

Today, though most of Fowler's curiosity is directed at the broadcasting media, he still spends little time before the TV screen or radio and claims to have no favorite programs. At home, in the rare event that he has nothing else to do, he watches whatever television shows his children prefer—among them Our Miss Brooks and Father Knows Best.

When the commission is on tour Fowler seldom has time for amusements. Most nights he works late, going over one day's evidence and reading briefs for the next. He often astounds witnesses appearing before him by remembering their written arguments better than they do themselves. His only regular recreation is a nightly game of cribbage with James Stewart or, when the commission's demanding schedule permits, a day of golf or fishing.

At the hearings he sets an example of executive neatness and easy informality, slouching lazily in his chair and using one of his briar pipes for a gavel. A model of courtesy, he delivers even the most incisive questions and arguments in a disarmingly tranquil manner. His quips are good-natured and he listens as attentively to high-school juniors gee-whizzing

the lack of good teen-age radio programs as he does to ministers who deplore television's plunging necklines. This is no small feat in itself, for the job of probing such a sensitive subject as broadcasting would shatter the patience of all but the most dedicated of men. Shortly after the hearings got underway, a witness in Winnipeg told the commission that many people were ignoring the CBC television station there, refusing to buy sets until a private station was allowed to open. A few days later, another witness in Regina declared that many people were ignoring the private station there, refusing to buy sets until the CBC moved in. Fowler glanced from Stewart to Turcotte, shaking his head slowly. "I guess," he sighed, "you just can't win at this game."

Even so, Fowler is confident that the commission will be able to do its job of blue-printing the future growth of television and radio in Canada. "I don't think it's an impossible task," he has said, "if only because it has to be done, somehow. Over the long pull a man, or a group of men, will do the reasonable thing. If you're patient enough and trustful enough, you can usually get a workable result."

Others are more pessimistic. When the commission was in Toronto, the Association of Canadian Advertisers' spokesman, Peter Wright, told Fowler bluntly that the commission hadn't a hope of finding a solution that would be valid for more than a few years. "We're just at the beginning, not the end, of this technical development called television," Wright said. "Unfortunately, this medium operates under human beings, and they're pretty good at making mistakes."

The chairman held up his hands in mock surrender. "That's enough," he said. "I'm feeling sorry already for the next royal commission." ★

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Mailbag

What makes people smart?

In Hugh MacLennan's article, It Pays to Pamper Our Children (July 21), I disagree with his statement that only one in a hundred pupils is educable. I say one hundred percent is educable.

A hundred years ago there were no primary schools in Iceland. The land was little known. The few tourists were scholars who had come under the spell of the saga literature. The verdict of these people was that there was no such thing as an illiterate Icelander, that they were all conversant with literature of quality. Such was the reputation of the Icelandic intellect that it was variously ascribed to: diet—fish was said to be brain food; purity of the race—no mixture in a thousand years; they were descended from the aristocracy of Norway. The most convincing explanation was that all Icelanders read and understand sagas, which had the same effect on the Icelandic mind as if every Englishman read and understood Shakespeare.

Although Icelanders were brought to Canada for their literary background, there is little to show today. One Icelander mourned, "They read only what is useful in making money." That is training rather than education; yet they are the same stock. . . . AMUNDI MAGNUSEN, PORT ARTHUR, ONT.

● From Hugh MacLennan's article: "Suffering does not purify: it degrades. Hardship does not ennoble: it coarsens. Misery does not improve the character: it makes a person concentrate on mean and petty objects (from Somerset Maugham)."

From Beverley Baxter's article (same issue): "Oscar Wilde wrote that out of sorrow have the worlds been built and at the birth of a child or a star there is pain." Baxter goes on: "Sorrow and suffering can enrich the human spirit and Lois Marshall proves that to be true." —HARRY E. CHILLMAN, TORONTO.

● I was surprised that MacLennan considers curling an "old man's game." In Saskatchewan we have ten thousand junior curlers.—LES NICHOLL, PRESIDENT, SASKATCHEWAN CURLING ASSOCIATION, SASKATOON.

Humor in our fiction

Congratulations on your story, When Every Woman Looked Like Regina Lee (July 7). The author not only shows a good sense of humor, but a vivid imagination.—MRS. R. A. HAWKINS, CALGARY.

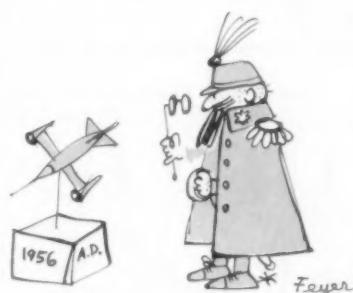
No rock 'n roll delinquents

In your report on rock and roll (What You Don't Need to Know about Rock 'n Roll, July 7), you are very acid. The way you pick Elvis Presley apart, before you even know him! The way you de-

scribe Bill Haley too! It seems to me you think rock and roll makes juvenile delinquents. If you can't write good about it, don't write at all!—J. K. RIMELL, VANCOUVER.

Is the air force obsolete?

If Gen. Guy Simonds really thinks the air force is obsolete (We're Wasting Millions on an Obsolete Air Force, Aug. 4) then the army and navy should be commanded by curators like any well-run



museum, instead of by generals and admirals. Simonds is a poor student of history if he does not know that air power played the major role in the defeat of Germany and Japan. I doubt if the true force of air power has ever been free from the jealous minds of military and political brass.

The general retreats to science fiction when he conjures up such a vision of guided missiles that do not exist. When and if the age of the guided missile arrives I am sure the air forces will not be backward in replacing men with missiles. From a military standpoint the aircraft is a guided missile but men steer it.

I suggest army experts stick to regimental balls and mustache wax and leave the air to airmen.—K. A. BENSON, BRANTFORD, ONT.

Nonsense on our covers

Your cover for July 7 on the photographing of the Fathers of Confederation is the most delicious piece of nonsense I have come across in a long time.—W. P. NYALL, ST. LOUIS, SASK.

● Your cover of July 21 gives a beautiful view of the Capilano suspension bridge, but is spoiled by three young hoodlums throwing paper darts on trees and ledges, creating an eyesore until rain or wind removes them. Mischief can be done in one hour that cannot be undone for a year.—MRS. FANNY R. HUNTER, VANCOUVER.

Do they really want Dewline?

As a Canadian in the United States, I'd like to ask: why won't Canada grow up? . . . For instance, take the MacLean's editorial on barring Robeson (Bar-

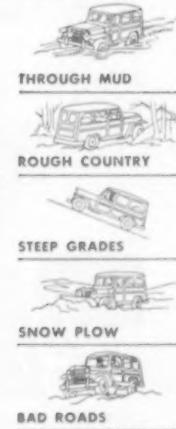
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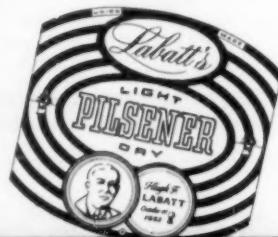
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ring Robeson Helps the Reds). Not content to stick to the subject, you put in a dig about the U.S. handling of the Daily Worker. Then there is Will Dewline Cost Canada its Northland? What would the U.S. want it for?

We came to the U.S. twenty-eight years ago, and in all that time we have never heard any but the most cordial and approving words spoken by Americans about Canada.—F. W. ALLINGHAM, BANGOR, ME.

On the next Royal Tour

Your editorial, Let's be Sensible about the Next Royal Tour (Aug. 4), is the best I have read.—MRS. R. M. DAWSON, CALGARY.

• What I would like to ask you: aren't you assuming too much that the Canadians are so keen on seeing the Queen. With due respect to the Queen as a person, her presence on Canadian soil constitutes infringement of our national sovereignty. — CARL ZEIMER, EDMONTON.

How to handle teachers on holiday

I always enjoy Robert Thomas Allen and especially commend his latest, How



to Handle Your Kids in the Holidays. However I have a peeve when viewing the problem from the angle of the teaching profession. The object of the two or three months' holidays is to allow teachers to take further study as well as enjoy a well-deserved rest. I have been a bit disillusioned when I see so many using this period to work in the mills and camps to make money to tide them over the months when no pay cheque is forthcoming. It robs one of the outstanding professions of its dignity. — HELEN IRWIN, CORNWALL, ONT.

A tax for traffic jams

The proposal in your June 23 editorial (How to tame the automobile) for the limiting of automobile traffic in downtown areas has one outstanding drawback. It would be difficult to administer a licensing scheme, as a constant check would have to be maintained on all cars to catch violators.

There is one solution, however, to this difficulty, and that is to discourage downtown parking. This could be done by taxing all parking lots (both public and private) as if they were occupied by buildings of similar structure as the surrounding ones, or by levying a special tax on parking lots. The operators of such lots would then have to pass on these costs to patrons and the increased fee would have the effect of the car tax without its attendant policing problems. Municipal lots would be limited to short-time parkers only—say, one hour.—JOHN S. RIDOUT, CHAIRMAN TORONTO MUNICIPAL COUNCIL.

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in the square
frosted bottle



It doesn't cost you an extra cent to give a drink the positive distinction of Gilbey's. So make a point of staying with the full strength gin—the kind in the square frosted bottle.

GILBEY'S GIN



Backstage at Ottawa continued from page 8

"Listening to George Drew makes me madder than anything else I know," Ross Thatcher confided

extravagance he had been the most consistent (and sometimes the only) parliamentary critic.

As a free-enterprise man Thatcher first thought of joining the Progressive Conservatives. No Conservative candidate has much chance in any Saskatchewan riding (unless his name happens to be John Diefenbaker), but this alone would not have discouraged Thatcher. He thinks the Liberals too are going to be beaten in Saskatchewan. What put him off the Conservative Party was not its slim hope at the polls, but its words and deeds in parliament.

To Thatcher it often seemed that the Conservatives were trying to prove themselves more radical than the CCF. They didn't seem to him to be a free-enterprise party any more—not as he understood the term. Also, he couldn't work up any enthusiasm about Conservative leadership.

"Listening to George Drew makes me madder faster than anything else I know," he confided to a friend.

Having crossed off the Conservatives, Thatcher took a long and by no means unsympathetic look at Social Credit. He thinks Social Credit is the only party now gaining strength in the west, and he admires the businesslike attitudes of Premier Ernest Manning in Alberta.

On their side, the leaderless Saskatchewan Social Crediters would have been delighted to enrol such a man as Thatcher. It was widely reported—and, so far as I know, never denied—that Thatcher was offered the Social Credit leadership in Saskatchewan before the much-publicized bid to Robert Kohaly, Conservative ex-MLA, a year ago last spring.

Precept, not practice, was the stumbling block that prevented Thatcher from joining Social Credit. He couldn't swallow their gospel.

"I tried as hard as I could, but I just couldn't understand it," he said later. "I can't make out what they're talking about with their monetary theories."

That left him with no party to support except the Liberals. He had been attacking them with vigor and effect for more than ten years—Conservative MPs had lots of fun in parliament one day, reading quotations from the former speeches of this new lamb in the Liberal fold. He is on record as believing they are wasteful of the taxpayers' money, incompetent, unbusinesslike and generally deplorable.

But in the end he could find no preferable alternative.



MACLEAN'S

Backers of Lester B. Pearson for the Liberal leadership are less hopeful now than they were in June that their man will still be available when the next Liberal convention is called. They are again afraid that he may be working for the

North Atlantic Treaty Organization by that time.

It has been prophesied for years, of course, that the job of secretary-general to NATO would be offered to Pearson whenever Lord Ismay retires, as he is

expected to do within the next few months. The story was last revived by no less eminent a newspaper than The Times of London, at the time of the NATO Council meeting in Paris last May.

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"Say, that really is a distress signal if he's run out of that good Canadian Sherry!"

W-2



Many of Pearson's friends then believed that if the job were offered to him he would turn it down. NATO seemed an increasingly superfluous organization. In spite of all the talk about its conversion to nonmilitary purposes most observers, including Pearson himself, were distinctly pessimistic about any such useful purpose being devised for the organization.

But Pearson was one of three foreign ministers—the Three Wise Men—appointed in May to study the possibilities of nonmilitary uses for NATO, and to report on them in December. As a result of his summer's work Pearson is vastly more cheerful than he was last spring about the future of NATO, and is again convinced that there is a big job ahead for the organization and for its secretary-general.

One function that everybody mentioned as a possibility for NATO was "political consultation," a rather vague phrase that in theory is supposed to be part of NATO's work already. The record in the past had been unencouraging though—allies continued to make their own moves in foreign policy and "consulted" each other after the event.

But this summer, presumably as a result of the renewed interest in NATO's nonmilitary services, consultation among the western allies has been more frequent.

Standard Practice

When people say "It takes all kinds to make a world," one always finds

This easily foreseeable:
You're going to be told about
A character who's out-and-out
Bizarre or disagreeable.

P. J. BLACKWELL

quent and more faithful than ever before. Also, they have had rather more to consult about, and will probably have still more in future.

NATO is obviously at the beginning of a general and fairly substantial reduction of armed forces by all its members. This was one reason why many people assumed it to be a withering, shrinking organization. Already the western partners have found the opposite to be true.

Unilateral decisions to cut defense budgets or defense forces could lead—in one or two cases very nearly have led—to a general rush to disarm, which would have the appearance and some of the effect of panic. NATO's machinery for consultation and co-ordination is proving just as essential for the reduction of strength as it was for the original build-up.

The assignment of the Three Wise Men is to find ways of improving and enlarging that machinery for peaceful purposes. To that end they sent out questionnaires to all member governments, asking in very specific terms what each thought could be done and what each was in fact prepared to do. The answers were due in before the end of August, and the committee hoped to get all foreign ministers together to discuss them in September.

But regardless of the result of this operation, Pearson is now convinced—as he was not convinced three months ago—that NATO still has a big job to do. He also thinks that NATO is doing it. ★

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We are often amazed how aluminum gets around to unusual places. Who would think of looking for aluminum in the stomach of a Zululand crocodile! . . .

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IN THE editors' confidence



John Cornish: You'll read his *Olga*, the centre of a satire, in a single issue.

Two novels coming up—meet our winners

LOOKS LIKE a good year for Canadian novels. In the last few weeks we've read two we think outstanding and we've given them each a Maclean's Novel Award of five thousand dollars.

The first, *Olga*, is a satirical tale dealing with a fanatical Russian religious sect in the Okanagan district of British Columbia. The author is John Cornish, whose earlier novel, *The Provincials*, excited critical comment in 1951.

The second, *Florencia Bay*, is about a disillusioned prospector searching for his own peculiar destiny on the lonely beaches of Vancouver Island. The author is James McNamee and this is his first novel. His short stories have long been familiar to readers of this magazine.

We plan to publish *Olga* in its entirety in a single issue of Maclean's late this year. *Florencia Bay* will be serialized in several issues later in the winter.

An awful lot of citizens on the Coast seem to be writing these days—perhaps it's the climate. John Cornish, for instance, has been scribbling things ever since he edited the campus paper at the University of B.C. in 1936. Besides his two novels he's published several short stories. He served six years as an army private and now works as a chain man on a survey gang.

We'll let James McNamee, another British Columbian, speak for himself:

"My mother was so Irish she wouldn't allow any child of hers to be born under the Union Jack. When her time with me had come, she left Victoria, crossed the Straits, was delivered by a U.S. army doctor, and died. My father brought me back to Victoria to be raised a Catholic by childless Presbyterian friends . . . I got thrown out of Grade 12 for something. I think it was for smoking . . . I went to McGill. McGill turns out good men. They turned me out my first Christmas . . .



James McNamee: His novel took 25 years while he argued with his wife in French.

"After I married, we lived in Europe then came out to Alberta and went into cattle and wheat. I got hailed out a hundred percent in a district that had never seen a hailstone in twenty-seven years. The wife went schoolteaching to keep me and the kids from eating gophers.

"The war started . . . I did all right. I started as a private and ended as a company commander.

"Then I worked for the B.C. government. My wife kept on teaching. She is head of the French department at the Abbotsford Senior High School.

"There's confusion in this house. We talk business in English and then throw cups and discuss each other's ancestry in French.

"I jumped out of a cherry tree and hurt my spine, and so quit my job to write a novel. There's nothing to writing. You start at fifteen and you publish at fifty." ★



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Silverware by Georg Jensen



Parade

Wanted: teachers! Sex no handicap

School's in again everywhere — including, we hope, Oakville, Ont., although the public school board must have been feeling pretty wan about chances a few weeks ago when it advertised in the Toronto Globe and Mail for teachers, "male or female preferred."

* * *

Every new term fortunately brings a tiny prodigy or two toddling to kindergarten to keep hope springing eternal in the teaching profession. A Burlington, Ont., teacher was delighted to discover that one of her new five-year-olds not only knew his alphabet but could spell quite a smattering of words — such as loving, Johnson, Mary, born, William, memory. Finally figured it out: the kid lived next door to a cemetery and had been playing among the tombstones ever since he could walk.

* * *

Any father knows what it is to have dumbounding questions hurled at him by his young. The question this Edmonton six-year-old shot at his pop was, "Dad, what makes cars get old?" And pop was flailing wildly about in his mind for an answer when two cars collided with a loud crash on the street where they were walking. The youngster shot a questioning glance at his dad, dad just shrugged his shoulders, and that was that.

* * *

In all the long and dauntless history of the RCMP never has a Mountie been so sorely tried as the young recruit pounding his first beat in Penticton, B.C. Ordered to bring in a drunk he was flatly refused entry to scene of the crime by a blunt and stubborn waiter. "The law says nobody under twenty-one comes in here, cop or no cop," declared the beer pusher,

tion cards. Since the information was needed immediately he called the four names over the plant P.A. system and asked the men to report at once.

One man fainted; another tripped over an electric cable and sprained his ankle; the third just stood frozen to the spot. Only the fourth man made it to the office and he had a stricken look. All four were expectant fathers . . . which may have been why they were too jittery to fill the cards out right in the first place.

* * *

A motorist whose path leads him occasionally through the interior of B.C.



reports with disappointment the removal of his favorite road sign from the foot of a hill leading into Armstrong, "Slippery when icy." And another who took to the quiet country lanes around Waterloo, Ont., to teach his wife to drive, reports that the nerve strain was happily broken for both of them by encountering a solemn fellow who had parked his car miles from nowhere, spread his music on the hood and was practicing the bagpipes.

* * *

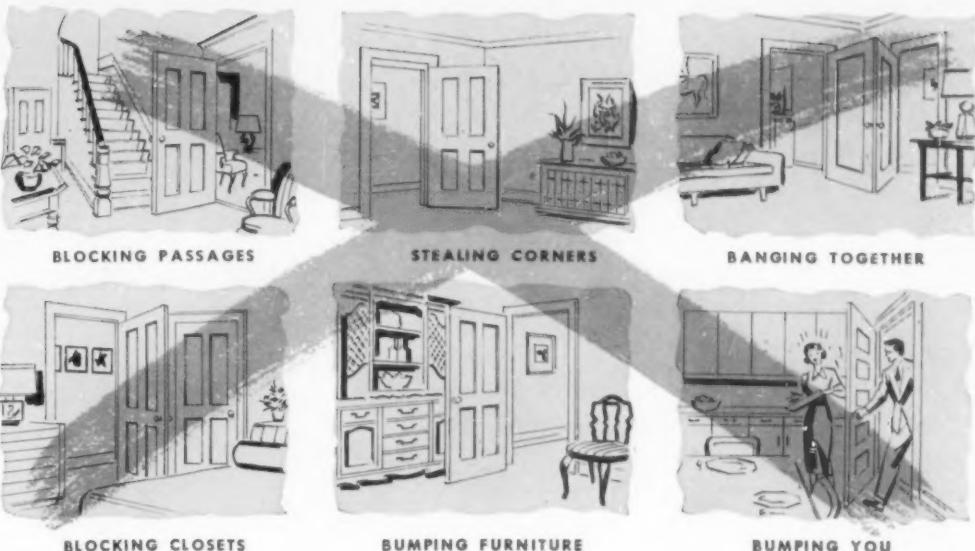
For the men folks, the fishing tackle is no more than stored laboriously away when it's time to overhaul the double barrels and heavy bores for the fall shooting. We don't know whether one hunter in Parkland, Alta., will be quite as keen for big game this season as he was last year when he went hunting for deer and came face to face with a big black bear. Not quite so startled as the bear, he dropped it with one shot, but taking no chances of its being only stunned he stood there and emptied his rifle into the beast. Upon skinning the animal he discovered there was but a single bullet hole in the entire hide.

* * *

Overheard on the police radio in Victoria, B.C.: "Please check on tattoo parlor on Johnson Street. Ask them not to tattoo people under age — especially Sea Cadets."

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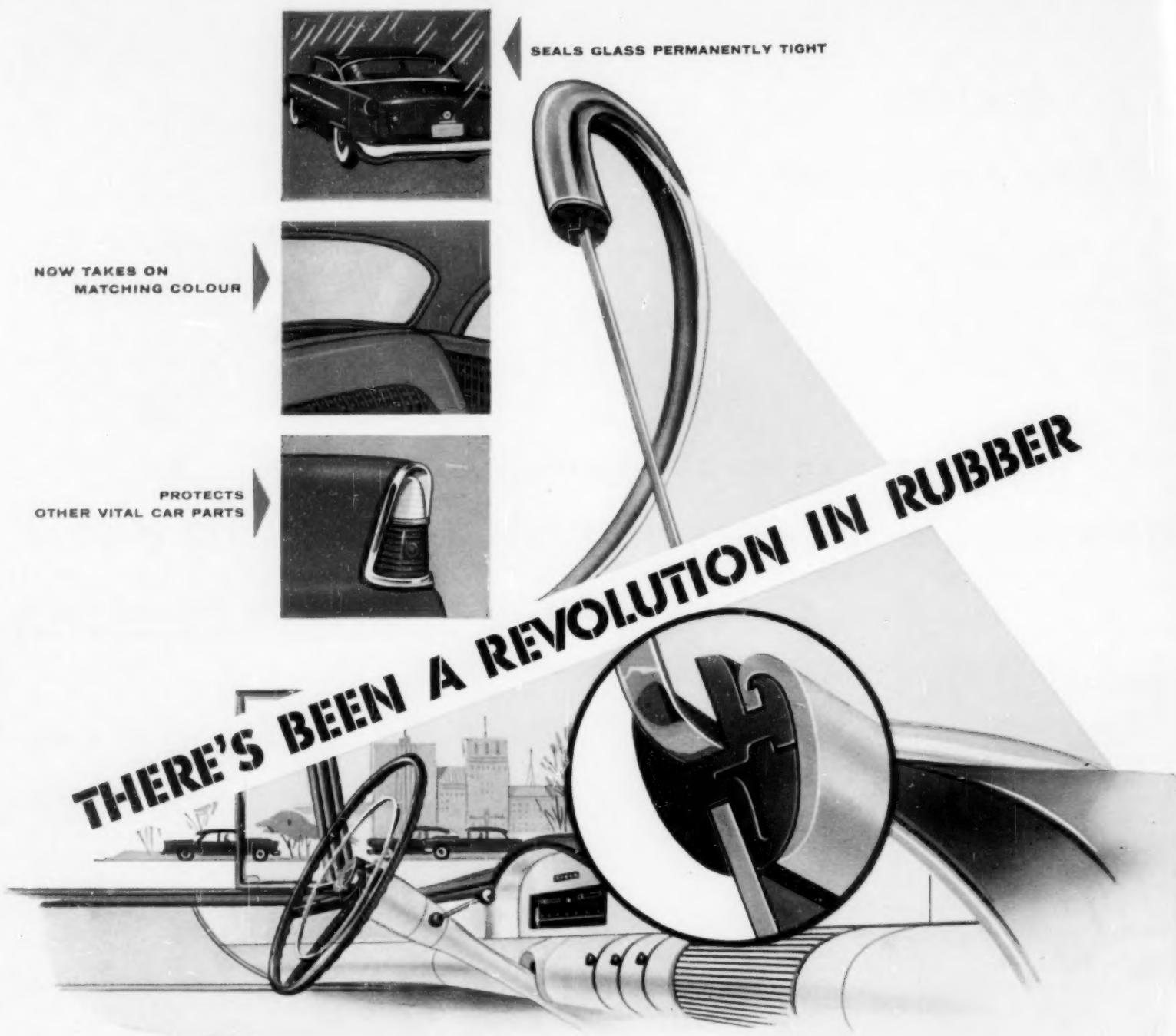
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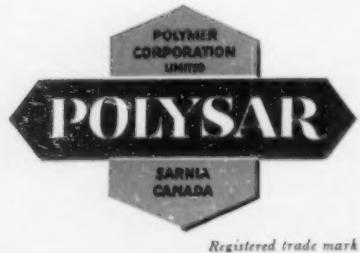
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